LIBERIA.

A republic founded by black men, reared by black men, maintained by black men, and which holds out to our hope the brightest prospects.—HENRY CLAY.

BULLETIN No. 3. NOVEMBER, 1893.

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WASHINGTON, D. C.

COLONIZATION BUILDING, 450 PENNSYLVANIA AVENUE.

Yours truly
J. A. Cheeseman

LIBERIA.

BULLETIN No. 3. NOVEMBER, 1893.

PRESIDENT CHEESEMAN OF LIBERIA.

Joseph James Cheeseman, the President of Liberia, was born in Edina, Grand Bassa county, March 7, 1843, when Liberia was still a colony. His parents were sent out to Liberia by the American Colonization Society and were among its early founders. His father died when he was sixteen years of age, leaving to him the care and support of a mother and large family, a duty which he faithfully discharged. He acquired all his education in the schools and college of Liberia, in which he made the most of his limited opportunities.

On January 8, 1865, he married Miss M. A. Crusoe, a Liberian, who had qualities admirably fitting her to share in his hard struggles as well as to gracefully fill the prominent station to which she has been elevated.

Mr. Cheeseman has been a merchant, and his high character, intelligence, and energy have raised him from small beginnings to a prominent place among the merchants of the West Coast of Africa, and brought him competence.

During his life he has most efficiently and creditably filled many offices in church and state. He was ordained pastor of the First Baptist church in Edina in 1868, and filled the position until he was elected President of the Republic; he has been president of the Liberian Baptist Association, superintendent of missions under an appointment of the Southern Baptist Missionary Convention of the United States, and President of the Liberia Baptist Missionary Convention.

When a young man he served in the militia of the Republic, and held the position of adjutant of the Second regiment; he was clerk of the county court, collector of customs of the port of

Grand Bassa, mayor of Edina, member of the Liberian House of Representatives, and judge of the superior court of Grand Bassa county; the duties of all of which offices were discharged in a most efficient and satisfactory manner. On the 5th of May, 1891, he was elected President of the Republic for a term of two years, as provided by the constitution of Liberia, and during the present year has been re-elected for a second term.

He is said to be a many-sided man, who has taken for his motto "Whatsoever thy hand findeth to do, do it with all thy might." By his ability and integrity he has fairly won his present position, in which it is believed he will retain the esteem and confidence of his fellow-citizens. The frontispiece of this Bulletin is from a recent photograph of President Cheeseman.

LIBERIA AS A FACTOR IN THE PROGRESS OF THE NEGRO RACE.

On the west coast of Africa, between the fourth and eighth degrees of latitude north of the equator, lies a little country whose brief history is full of remarkable interest and significance—the Republic of Liberia.

If we search for the original purpose in founding this African state, we shall find, in this as in many other important human enterprises, that it was complex. At that time Negro slavery was a potent factor in the industrial and political economy of a large portion of our country, and was not only fostered by State laws but was recognized by the National Constitution and protected by National statutes. The individual motives involved in this movement were various:

To establish a state on the coast of Africa which eventually should become a powerful instrumentality in christianizing and civilizing the Dark Continent;

To secure a place where the free people of color in the United States could have a fair and full opportunity to develop their highest capacity;

To provide a practicable way for the gradual emancipation of all the slaves in the United States, and thus to remove a great national evil;

To relieve the country of a class of people not homogeneous or desirable;

To strengthen the institution of slavery by ridding the slave states of an obnoxious and dangerous element in slave communities.

From the first, however, the higher motives very largely predominated, and they inspired the zeal and controlled the action of the leaders who founded Liberia and ever since have labored to promote her welfare.

It was on the 21st day of December, 1816, now more than seventy-seven years ago, that a little band of philanthropic men met in Washington and organized a Society having for its object to colonize, with their consent, the free people of color of the United States in Africa or such other place as might be deemed expedient. Among the fifty original members of The American Colonization Society are to be found names that have a prominent place in the history of our country—Henry Clay, Daniel Webster, Bushrod Washington, John Randolph of Roanoke, Francis S. Key, William Meade, Robert Finley, Elias B. Caldwell, and others. The list of names with the original signatures is still preserved in the archives of the Society.

There was at once an encouraging response to the call of the Society; its membership increased; coöperative State, county, and local societies in all sections of the country sprang into existence, and liberal contributions began to flow into its treasury. The Government of the United States, seeking a way to provide for the slaves whom it had recaptured and brought into its ports, in its efforts to exterminate that monster, the foreign slave trade, joined hands with the Society.

In December, 1821, Lieut. Robert F. Stockton, U. S. N., agent of the United States Government, and Dr. Ely Ayres, agent of The American Colonization Society, obtained, by purchase from King Peter and other African chiefs, Cape Montserrado and a surrounding tract of country, eligibly situated on the west coast of Africa, between the fifth and sixth degrees of north latitude; and in January, 1822, a small company of Negroes from the United States, who a short time before had been temporarily left at Sierra Leone, were settled there.

The Colony of Liberia, thus commenced, grew in numbers, enlarged its territories by repeated purchases and treaties, and

was managed and controlled by The American Colonization Society down to 1847, when, with the consent of the Society, it declared its independence and established a national government, republican in form, and modeled after that of the United States, from whence most of the colonists had come.

Successive additions were made to its territories, until they reached from the River Gallinas on the northwest to the River San Pedro on the southeast, a distance of six or seven hundred miles, and extended back from the sea-coast some two hundred miles or more to the Kong mountains. It is true that a few years ago this territory was encroached upon a little on the northwest by England, and that France is now attempting to appropriate a portion of it on the southeast and east; yet Liberia still stands there on the coast, in front of and encircled by the great River Niger, which we hope at some day may flow throughout its long course entirely within her borders. Liberia stands there like a sentinel, guarding a door and offering a welcome entrance to all the exiled sons and daughters of Africa who desire to return to the only spot in their fatherland not shadowed by a foreign protectorate.

Has this colonization scheme been a success or a failure? What is Liberia to-day? What is the significance of this little Negro Republic away out there on the west coast of Africa? The significance to the colonists from the United States and their descendants who now constitute the most important part of her citizen population? To their brethren whom they left behind them? To the exiled Negro wherever found in other parts of the world? And to the two hundred millions of aborigines who still dwell on the great continent, the ancestral home of the race?

The answers to these questions within the limits prescribed for this paper must be brief.

What actually has been done toward founding Liberia by The American Colonization Society and its co-workers is oftentimes greatly overestimated. From first to last the sum of $3,200,000 has been expended. A total of 16,413 Negroes, coming, for the most part, from the condition in which slavery in the United States had left them, have been colonized there, and although the present is an age of marvelous rapidity of progress, it should be remembered that until very recently Africa was remote from

the sphere of its influence. How large and powerful and prosperous a State could you reasonably expect to be founded by an expenditure of $3,000,000 in purchasing a territory and transporting and settling 16,000 Negro colonists, ignorant, poor, and discouraged, for the most part just escaped from hundreds of years of bondage, preceded by thousands of years of barbarism?

Lord Bacon, in his essay "Of Plantations," says:

"It is a Shameful and Unblessed Thing, to take the Scume of People to be the People with whom you *plant:* And not only so, but it spoileth the *Plantation;* For they will ever live like Rogues, and not fall to worke, but be Lazie, and do Mischief, and spend Victuals, and be quickly weary, and then certifie over to their Country, to the discredit of the *Plantation.*"

Had this essay been written with a full knowledge of much of the experience in Liberian colonization, his lordship's philosophical statements could not have been more accurate and applicable to the facts in the case.

It may be that circumstances compelled Liberia to discard her colonial management and establish an independent government somewhat prematurely, and yet I venture the assertion that her neighbor, Sierra Leone, which was founded as a colony in 1787, and has continued one ever since, over a century, on which the British government has expended probably more than $30,000,000, is to-day not as well qualified to undertake and perform the offices of independent government as is the little Republic of Liberia.

In 1874 Mr. Henry M. Stanley, in describing Sierra Leone, said:

"After a hundred years of occupation, the English are building a wharf! After a hundred years of occupation, the Episcopal church is but half constructed, and I should fear to say how much precious money has been spent on the rickety-looking edifice! After a hundred years of occupation, the zealous English missionaries have not been able to inculcate in the Negro's mind that it is sinful to lie, to steal, and to be lazy! And this is the result of christianizing Africa at Sierra Leone! If I were asked where I could find the most insolent, lying, thieving Negroes, I should undoubtedly say at Sierra Leone."

I will also venture the assertion that any fair-minded judge who will intelligently master all the facts in the case, at the con-

clusion will wonder, not that Liberia has done so little, but that with so little she has done so much.

As in all new countries, so in Liberia it is difficult or impossible to make exact statements in detail in regard to many things. Much of the territory, acquired from chiefs of native tribes, has not yet been accurately surveyed, and the population, especially the aboriginal portion of it, has never been actually enumerated. The territorial area is stated to be from 120,000 to 150,000 square miles—say twice as large as the New England States. Generally speaking, the climate is most agreeable and healthful for the Negro, and it is believed by many that the Caucasian can live and thrive on the high plateaus of the interior; but this is yet to be demonstrated. The least healthful portion of the country is near the coast, where the swamps creeks, and mouths of the rivers are subject to the ebb and flow of the tides, which produce a malarial atmosphere in a region still rejoicing to so great an extent in its natural luxuriance of vegetation. As this region becomes more densely settled and subdued and transformed by the arts of civilization its climate becomes more salubrious.

The soil is one of the richest and most fertile in the world, capable of producing in abundance not only everything grown in the tropics, but many of the fruits, vegetables, and cereals of the temperate zones. The great mineral wealth, still scarcely touched, can be fully revealed only by a scientific exploration, which has not yet been made.

The population is composed of the colonists and their descendants, now supposed to number from 15,000 to 20,000; an equal number of natives dwelling in proximity to the colonists and more or less civilized, both classes professing to be Christian; and from 1,000,000 to 2,000,000 of aborigines, who are pagan and Mohammedan.

The settlements made by the colonists form only a narrow fringe along the sea-coast and on the margins of the creeks and banks of the lower part of the rivers, nowhere extending back more than 20 or 30 miles from the ocean. This is the most unhealthful part of the country, but from necessity the settlements have hitherto been confined to this tide-water region. In our own country the first settlers sought the margins of the sea, bays, creeks, and navigable rivers, which afforded the only highways

for travel and transportation, and Liberia is still in a primitive state, without railroads, telegraphs, telephones, or even an extensive system of good common roads.

No history of Liberia has yet been written, and the materials for it are scattered through so many papers, documents, and volumes that it is impossible, in a short time, to become acquainted with them. This difficulty is increased on the one hand by the extravagant statements and eulogies of its overzealous friends, and on the other by the detraction of persons not competent to speak intelligently on the subject, and the misrepresentations of its enemies, which are frequently being paraded in the newspapers before the public.

In recent years The American Colonization Society has been able to render to Liberia but little material assistance. The revenue of her government, largely derived from imports, is small, but annually increasing. The receipts for the year 1892, as officially reported, were $188,075.45; the disbursements for the same period were $165,943.60, leaving a credit balance of $22,131.85. At times there has been a lack of good discretion in the administration of her fiscal affairs, but these are the exceptions, not the rule. She has been commendably free from official embezzlements and defalcations, and it is believed that her just national debt is not large.

The official reports for the same year state that her public-school system included 51 school districts, 58 schools, 60 teachers, 1,750 pupils, and that the cost of tuition was $10,819. There were at the same time 1,815 pupils in private denominational schools. This is a meager showing, and these schools are far from being efficient in their accommodations, equipment, and qualifications of teachers; yet it is a beginning in the right direction, and we cannot forget that it was in the year 1671, nearly seventy years after the first English settlement at Jamestown, in Virginia, when Berkeley, the governor of the colony, said, "Thank God there are *no free schools* nor printing press; and I hope we shall not have these hundred years, for learning has brought disobedience and heresy and sects into the world, and printing has divulged these, and libels against the best government."

There are no drinking saloons in Liberia and the use of intoxicants is not so common or excessive as it is in many other countries.

But Liberia has not yet christianized and civilized a countless number of native Africans! And why should we already look to her for such vast results? As well might we look to the little light-house on her Cape Montserrado to illuminate a broad expanse of the Atlantic ocean on a dark and stormy night. It was not reasonable to expect that so little weak leaven should leaven so large a lump. She has, however, extended her Christian and civilizing influences to thousands of the native Africans within her borders, who have attended her churches and schools, learned her language, adopted her customs, accepted her Christian faith, participated in the rights and duties of her citizenship, and, to some extent, in the administration of her government.

During the forty-six years of her national existence she has had no bloody or violent revolutions. Twenty-three administrations have succeeded one another at the behest of her suffrages expressed in the legal and orderly manner provided by her constitution and laws. She has administered the executive, legislative, and judicial departments of her government, maintained peace and order among her citizens, collected and disbursed revenues, held diplomatic intercourse and made numerous treaties with foreign nations, organized a postal system, established public schools, and exercised all the functions of an independent republican government. She has produced a few men—cultivators of the soil, mechanics, merchants, teachers, ministers of the gospel, doctors, lawyers, diplomatists, and statesmen—who, in character, in ability, and in attainments, would do honor to any country. The names of Johnson, Russwurm, Roberts, Benson, Anderson, Blyden, Sherman, Ferguson, Gibson, Davis, Irons, Cheeseman, and others are all worthy of being noted and remembered. She may safely challenge a comparison of her record with those of most of the states of Central and South America during the same period.

Is Liberia a failure? Bishop William Taylor, the Nestor of enterprises for christianizing and civilizing Africa, who is thoroughly familiar with Liberia, a competent and, I believe, impartial witness, has recently said: "The Liberian Republic is *not* a failure, and if not crushed by foreign invasion will yet make an honorable score for the possibilities of a Negro nationality."

Is Liberia retrograding? Yes, and No. If "to stand still is to go backwards," she has for a time been retrograding. Herr

Büttikofer, a German scientist who spent five years in exploring and studying Liberia and has recently published a report of rare and valuable interest, says, "*The difficulty with Liberia is that she has depended too much upon others and too little upon herself.* I am well satisfied that the Negro is as capable of development as the white man."

In her colonial days, when the colonization societies were expending large sums in transporting emigrants to her shores and establishing homes for them there, she depended largely upon their aid; and when the Negro in the United States was made free and a citizen and the resources of the colonization societies and emigration by its aid began to decline, she failed to note the change of the times and to change with them.

For the last twenty years she has been looking backward, expecting the past to return, and meanwhile the resources upon which she relied in earlier days have been growing less with each passing year, until they have almost vanished.

She has now to look forward, put her own shoulder to the wheel, and take for her motto "Help thyself and God will help thee." She must enlarge and develop her school system, introducing manual and industrial training; begin to make roads and push her way back from the coast into the higher lands, stimulate her population to habits of industry and thrift, encourage the cultivation of her generous soil more extensively, and especially the production of those articles for which she can find a ready and unlimited market abroad. Trading has hitherto monopolized too much of her attention, and she must now concentrate her energies upon producing. In her rare facilities for raising coffee alone, she has that which can make her a rich people, and its cultivation and transportation require no expensive machinery or great outlay of capital. Each small farmer, by industry, can have his grove of coffee trees yielding a handsome annual income in gold. She has nothing to fear from the overproduction of this staple of commerce, for its superior qualities are well known in the markets of the world, and the demand for it is unlimited. Add to this cotton and other fibers, rice, sugar, rubber, valuable dye and other woods, palm oil, and many other tropical products, the mineral resources yet to be developed, coal, iron, copper, silver, and gold, and what richer and grander opportunity for material prosperity

has any country on the face of the globe? She must bestir herself and enter into the possession of her heritage.

Will Liberia do this? There are signs of new life, and I believe she will. By such a course she will no longer need to depend upon emigration stimulated and supported by colonization societies; emigrants of a higher order of intelligence and enterprise from this and other lands will soon learn of the superior opportunities awaiting them there and will find and pay their own way to her shores, bringing with them at least the little capital required by every one to make a successful start in a new home.

After the close of our civil war and the change in the Constitution and laws which gave the Negro freedom and citizenship in this country, The American Colonization Society made a serious mistake in continuing to look upon Liberia as an asylum for an ignorant, dependent class of Negroes in the United States. The time had come for a change of point of view, and when *the interests of Liberia* should have been considered paramount. The weak and helpless, those who require constant direction and assistance from others, can better be cared for here. Liberia needs young men and women, strong in body and character, of intelligence and energy, competent to plan and work on their own account. There is no longer room there for the ordinary day laborer who can work only under the direction of others. The native population furnishes a superabundance of such labor for a very trifling remuneration. She wants emigration to increase her civilized population, and thus to assist in developing her bountiful resources, in pushing forward her modern improvements, and in building up her nationality; but to effect this, her recruits must hereafter be the most intelligent, the strongest, the best. The American Colonization Society is now addressing itself to the accomplishment of this end.

This little Negro Republic, which now takes up so small a space on the map of a great continent, is to my mind of great significance. The white man already dominates Europe, the three Americas, Australia, and the western part of Asia; and the yellow man has possession of the eastern part of Asia and its continental islands. Africa, next to the largest of the grand divisions of the earth, and apparently the richest of all in its natural resources, may have been reserved as the field on which

the black man is to demonstrate the equal capacity of his race for nationality, and there, if anywhere, he may secure its recognition and perpetuity. If Liberia succeeds, the hand on the dial of progress in nationality for the Negro race will be set forward hundreds, if not thousands, of years.

On what she has already done, on what she now is, and especially on the great opportunities which lie before her, Liberia may rightfully appeal to her brethren everywhere and say, "Come over and help us;" share in the labors and partake of the rewards; the common ties of blood and race have bound us to a common destiny. *Quo res cumque cadent, unum et commune periclum, Una salus ambobus erit.*

J. Ormond Wilson.

COMMERCIAL AFRICA.

Before the dawn of history the African continent witnessed upon its northern borders the genesis of our civilization.

Four thousand years before Christ, Egypt there began that career which culminated in making her the acknowledged field and luminous center of the learning and the arts of the then known world, and from her perennial spring we have not yet ceased to draw profitable inspiration.

Strange as it may seem in the environment of modern ideas and acquirement, the geographic knowledge of Africa was for many centuries confined to this strip of its northern border, hemmed in by the lagging art of navigation, by the great, mysterious, arid, and seemingly impassable desert region, and by hostile hordes of barbaric nomads.

And stranger still, that a continent whose northwestern shores were visited by wandering Carthaginians in open boats six hundred years before Christ, who subsequently founded colonies and established commercial relations with the people of the interior, should have again faded away into comparative oblivion.

And still more strange, that a continent once largely under the domination of a Christian power and visited and controlled by its missionaries, who, among thousands of others, baptized the king of Congo, and a long line of more or less Christian kings till 1670, should have relapsed into pagan darkness and wiped out every trace of Christian influence.

And still more remarkable, that a continent which in the cycle of centuries has witnessed the subjugation and civilization of Europe, of the British isles, of the American continents, and the island continents of the Southern hemisphere, should still remain geographically, ethnographically, and commercially the "dark continent," the land of romance, of adventure, and discovery *par excellence.*

Its heart still keeps its mysterious secret of material wealth and strange populations inviolate in the declining years of the most inquisitive, productive, progressive, and aggressive century the world has known, as it kept it in the days of the Carthaginians and of Bartolomeo Diaz.

It is strange, and yet there are good and sufficient reasons in the peculiar geographical, topographical, and climatological character and conditions of this "the most interesting, most wealthy, and most romantic of all the continents of the earth" to account for the seeming strangeness.

It is not, however, my present purpose to enter into historic or physical details of the African continent, except when necessary to illustrate or defend its great commercial value, but rather to call especial attention to the neglect which Africa has suffered not only because of these known peculiarities, but also from the dense ignorance of the commercial world regarding the fabulous mineral and agricultural wealth which it offers to its enterprise.

Regarding these hindrances to African development which have been suggested, it will suffice to say that there is nothing in the physical geography or in the climates of the continent, as, whatever the climate, men of energy and good endowment are not likely to be intimidated by it, or in the hostility of the native races of any part of discovered Africa which will suffice to bar out the indomitable European or prevent him from taking peaceable or forcible possession of the country for his own and the world's advantage, or which will prevent Africa from joining in the great march of modern civilization and commercial development.

In full confidence in this ultimate possession and regeneration, it is my purpose to show here the feeble part American merchants have thus far taken in its development, than whom in modern times none have had a better, if an equal, opportunity.

The little Republic of Liberia, founded, organized, and in great part maintained by their philanthropic generosity, has been waiting for a half century the kindling of the spirit of American enterprise in its direction, anxious and willing to do her part in opening the pathway of commerce to her fertile valleys, to the wonderful treasures of her virgin forests, and the mineral wealth of the *hinterland* which are within her grasp, but which she, if possessed of the desire, has lacked and still lacks the means and the knowledge to develop.

For the most part she has waited in vain!

Her commerce is chiefly in the hands of Germany and the Netherlands; her forests still retain their untold treasure; her fields lie dormant, and her mineral wealth, which is reputed and believed to be great, entirely neglected, and her whole wide interior, with the trifling exception of a few parts or points, remains both to Liberians and Europeans a *noli me tangere.*

Tired of waiting for us and pressed by her necessities, she has finally yielded to an English company, in which Lord Raglan is said to have an interest, valuable concessions upon her products and commerce—concessions which, like that granted to the Royal Niger Company by England, are sure to lead to future commercial complications. (It is doubtful, however, if these concessions, even if confirmed by the Liberian legislature, can be maintained under its treaty and international obligations to other powers.) Her authorized agent has also entered into an agreement to cede to France, in settlement of a doubtful claim made by that power, one-fourth part of her entire sea-coast known as the Ivory Coast.

POPULAR MISCONCEPTIONS.

Among the reasons for this remarkable neglect of commercial opportunities is the extraordinary conservatism of American merchants in foreign transactions which distinguishes them from those of all European nations; and beside this are the prevailing misconceptions of Africa and its people, which are as vast as the continent and as varied as its products.

I have heard the distinguished president of one of our most enterprising geographical societies declare that "the population of Africa is about equally divided between the Negroes and Mo-

hammedans," which is equivalent to asserting that the population of the United States is about equally divided between the whites and Methodists.

Dr. Hans Meyer forcibly says that "at present (1891) in the minds not only of the ignorant many, but a large proportion of the cultured few, 'Africa' means a confused jumble of 'niggers' and 'savages,' with heat, lions, deserts, palm trees, and plantations as an appropriate setting," and that "he indeed must be a notable exception who remembers that the word Africa includes a continent extending through 70 degrees of latitude and embracing every imaginable climate."

The African races and tribes are extremely numerous and diversified, and the term Negro can be correctly applied only to a very limited number of Africans. It is the ideal type constituted by the assemblage of certain physical characteristics exemplified in the natives of New Guinea, on the west coast, and in their descendants in America and the West Indies.

The region of the race, as closely defined as possible, extends, says Cust, from the Senegal, on the west, to the north bend of the Upper Niger, at Timbuktu, along the northern shore of Lake Tsad, and skirting the great Sahara to the basin of the Upper Nile as far as the Sunset Nile. The southern limit is supposed to extend no further than the Cameroon mountains.

"The Negroes," says Ashe, "are confined to the Upper Sûdan and toward the west coast." They are the aboriginal inhabitants of North Equatorial Africa, as the Hottentots are of Southern Africa, and form but one of the six great groups: the Semitic, the Hamitic, the Nuba Fulah, the Negro, the Bantu, and the Hottentot-Bushman, together speaking, as far as geographically located, a total of four hundred and thirty-eight languages and one hundred and fifty-three dialects. Of these groups the Negro is the most inferior, and "is not only a Negro in his exterior, but in all his parts most profoundly situated." (Virey.) The typical Negro is a true savage, and, while it is true that all typical Negroes are Africans, it is not true that all Africans are Negroes.

THE STATE OF CULTURE

in the aboriginal population is not nearly so low as is imagined; many tribes of the various groups, particularly in the interior,

where the isolation is most complete, have attained a very considerable degree of cultivation and knowledge of the common arts; notably is this true of the Mandegnas, a race remarkable for an ambition to learn, cheerfulness, truthfulness, honesty, and industry. (West Afrika vom Senegal bis Benguela.) Their musical instruments are the flute, zither, harp, bells, and drums.

The Mande language has a vocabulary by Koelle. Located in the hinterland of Liberia, they are smelters of iron and workers in gold and ivory, tanners of leather, weavers of cloth, and makers of an infinite variety of domestic articles.

The Veis, also of Liberia, who, having obtained a knowledge of the existence of letters from their contact with Arabs, have invented an alphabetic primer of their own language, original, syllabic, and independent both of the Arabic and English characters, and which is, as far as we have any information, the greatest effort any African tribe has ever made in the cultivation of science, as the use of a written character and the necessity for it imply a degree of civilization to which the majority of African tribes have never risen. Doălu Bukere was the inventor of this charactor about 1834; it was afterward used for Mahometan purposes, but in its invention they had no share. The Veis make their pens of reeds and use indigo for ink.

The Ovampos, a Kaffir group, are remarkable for their honesty, which is entirely exceptional in Africa. They have magistrates, and recognizing theft as a crime, punish it with death.

The Makolos are hospitable, honest wood-carvers; the Djours skillful iron-workers, and the Bechuanas are good metal-workers, fur-dressers, and architects.

Among the tributaries of the White Nile, in north latitude 5° to 10° and east longitude 25° to 30°, at Sakara and Benghieh, are tribes of natives as white as Europeans, having oval faces and silky hair.

The Baganidas of Victoria Nyanza are beautiful brass, copper, and ivory workers. In 1805 Mungo Park was astonished at the beauty of the mountain-land in the Kingdom of Dentila, among the upper waters of the Gambia, and wondered at the industry of the people.

The Dahomeans of the slave coast, who otherwise have an unenviable reputation, show a sufficient natural capacity to be accorded a very respectable position in industrial artisanship.

Glass-making is not altogether unknown among them. They make cloths of cotton and many other textiles, and their dyes of blue, red, and yellow owe their peculiar richness to native coloring substances. Tanning is also perfectly understood, and salt is obtained from sea water by evaporation.

The list of native accomplishments might be indefinitely extended, but this will suffice to show that the domestic arts are not entirely unknown, and that absolute barbarism is the exception rather than the rule, even in the heart of "savage" Africa, and that among these primitive races, even upon the "slave coast" and in the Dahomean Kingdom, distinguished by its inhuman and barbaric practices, we find not only a written, syllabic, and independent language, but political and social aphorisms, precepts, and proverbs in common use, which in expression and sentiment belong to the highest civilization and "indicate the knowledge and practical details of moral virtues:" a striking confirmation of Prof. Max Müller's well-known observation—that "to divide civilization from barbarism by a sharp line is impossible. There are remnants of barbarism in the most advanced state of civilization, and there are sparks of civilization in the most distant ages of barbarism."

It will also be remembered of the Bantu group above mentioned, of which the Zulus are a part, that Lord Beaconsfield declared that they "have outwitted our diplomats, outmaneuvered our generals, and converted our missionaries, and yet we call them savages." In short, says another, "there is no new thing found in Africa that is not in some form found in our modern civilization, and no new thing in civilization but has its embryo and prophecy in the simpler life of its people."

A curious instance is found in Dahomey, where public prostitutes were licensed and the proceeds of the tax paid into the public treasury long before the practice was adopted by the modern legislator and considered as a radical interpolation in modern civilization.

In passing, it may be said that our condemnation of these primitive peoples must be tempered by the consciousness that we, in truth, have no justification in our past for the pride with which we boast of our own humanity, as Schweinfurth suggests, remembering that Massachusetts burned alive negro criminals as late as 1755.

If we denounce these barbaric horrors of the Dahomeans, "I will ask," says L'Abbé Pierre Bouche, "if our fathers did not commit similar atrocities? If Rome did not amuse itself by throwing Christians to the lions of the arena?" And Dr. Junker philosophically adds that "these practices are to be judged more leniently than when viewed calmly from the standpoint of a higher culture."

MISCONCEPTIONS OF CLIMATE.

But perhaps the most common misconceptions of Africa are in reference to its climates and physiographic features.

It is regarded as a vast swamp reeking with malaria; as a region of unbearable moisture and intolerable heat; as a vast and irreclaimable desert; as a jungle of vast extent; as a continent of immense and almost impenetrable forests, and as a country of absolute and irredeemable savagery. All these conceptions are true of parts of Africa, as they were once true of England when Britain was in possession of the Keltic tribes, its hills covered with primeval forests, and its valleys occupied by impenetrable swamps, and as they were once true of Germany, and are at this moment true of parts of the United States and her territories; but because of these conceptions, or of their truth, as applied to us, we do not propose to abandon the country, nor do we hear of any disposition on the part of our neighbors across the water to adopt toward us a policy of non-intercourse.

Unquestionably climate has its influence upon the physique and character, and has had its baneful effect upon the African coast races from the beginning.

A glance at the orographical map of Africa will show the backbone of the continent lying toward the east, its great river system stretching toward the Atlantic and breaking through the rocky barrier of the great central plateau, wandering aimlessly upon the great littoral plain bordering the African coast, and finally reaching the Atlantic through the dense mangrove swamps by numerous mouths and alluvial deltas. The miasma arising from the decay of the exuberant vegetation of these lower lands under the rays of the torrid tropical sun, the conditions of temperature and moisture, and the feeble atmospheric impulse of

the region are undoubtedly weakening to body and mind, and the conditions are generally unfavorable for the development of individuals or states.

From the same causes the Romans in the East became effeminate, and the English in India become lazy and sensual, remarks Bluntschli, who is supported by the Abbé Bouche, who, from his experience of a long residence in Dahomey, declares that "À l'anémie physiologique correspond ce que j'apellerai volontiers l'anémie intellectuelle et morale. * * * L'intelligence comme le corps, a ses langueurs; elle supporte mal une application soutenue; l'imagination s'émouse ou s'exalte outre mesure, la volonté perd de sa vigueur; le caractère s'aigrit."

At greater elevations, with a lower temperature, decreased humidity, and stronger food, the physical and mental development and activity are positively greater, and are in a measure dependent upon these conditions.

In all tropical regions the health of the population rises and falls with the hygrometer, and the dryer regions of the upland areas are more continuously favorable to health; but even in these areas of greater altitude exceptions will be found to these favorable conditions in the low river valleys and swamps, and in the deep and dry depressions of the surface, in defiles and ravines which are secluded from the refreshing and cleansing winds.

It was Livingstone's opinion, than whom no European had larger opportunities for observation in Africa, that no man was "absolutely efficient" there at a lower level than three thousand feet above sea; but even at that altitude, in the present hygienic conditions of the country, care must be taken, as already suggested, in selecting a location for a residence.

As the great littoral plain of the African continent, watered by the shallow, sluggish rivers, was until within a comparatively few years the only known portion of Africa, the whole continent has suffered from the unenviable reputation it acquired among visiting Europeans. As, however, the traveler mounts from the coast to the interior plateau or central table-land, there will be found, broadly speaking, three distinct areas and climates:

First. That of the coast.

Second. The semi-continental (at an elevation of two to three thousand feet).

Third. The central-continental, or that of the high table-lands and mountain districts of the interior.

He will also find among the varied physical conditions of the tropical region (23° 28′) a corresponding variety of climates even in the lower areas, which are especially adapted to European settlement, and even upon the miasmatic coast of Portuguese Angola, within the tropics, may be found, in the district of Mossamedes, a healthy region which is regarded as the sanatorium of the neighboring coast.

"The German Kamerun is upon the coast, in the heart of the tropics, but possesses a magnificent sanatorium in the lofty Kamerun mountains."

Passing to the interior, in the same torrid zone, there will be found upon our way to the slopes of the great mountain region of Kilima Njaro every conceivable climate.

Singularly, in the lower areas, the malarial lands of the tropics, we also find in operation the universal law of adaptation to environment and of the survival of the fittest and strongest to live and resist the baneful influences of their surroundings through a succession of generations.

The coast races have under these conditions acquired a comparative immunity from miasmatic diseases if not from the mentally enervating and deteriorating effects of the climate.

It is also well established that this immunity is local and that the coast tribes, having acquired it in the place of their residence, lose it by their removal and subjection to different climatic conditions even in regions of greater altitude.

One of the most recent illustrations is furnished by the Maistre expedition, which, departing from Loango in March, 1892, with one hundred and seventy-nine men, returned in March, 1893, after a journey in the interior of three thousand miles, with but one hundred and thirty-two men.

The six European officers came out safely after more or less sickness, but forty-two of the natives had died from sickness or fatigue and five had been killed by enemies. Mungo Park's caravan, in going from the coast to the interior nearly a century ago, met a similar fate, and of thirty-five soldiers and four body servants but one servant reached the banks of the Niger.

Neither is it uncommon for persons acclimated in these regions who are quite well, to be attacked immediately on going to sea or into a purer atmosphere.

Dr. H. Martyn Clark, of Amritsar Punjaub, India, in his paper read before the Scottish Geographical Society (Remarks on malaria and acclimatization) says: "We frequently have cases of people who while in India enjoy perfect health, but whom when they come to England suffer from severe attacks of malarial fever. In nine years of Indian life I have had malarial fever eight times. In the one year furlough at home I have had thirty attacks." Herr Büttikofer, of Leyden, relates the same experiences.

It remains, however, to be said in favor of these regions of the littoral plain that they have the advantage of the prevailing sea wind, called the "Doctor," which is absolutely free of miasma, and that endemic, epidemic, and contagious diseases like typhus and cholera and such children's diseases as scarlet fever, diphtheria, and measles are nearly if not quite unknown. On the east coast, however, cholera, on its western march from its Asiatic home, sometimes reaches to the eastern Sûdan.

Among the Europeans in Africa phthisis is very rare and sunstroke seldom occurs, and because of the immunity from epidemic and contagious diseases it is highly probable, in the absence of accurate statistics, that the average death-rate on the coast, notwithstanding the malarious conditions, is not in excess of that of many European or American cities.

Dr. Leipoldt expresses the opinion (Die leiden des Europäers im Afrikanischen tropenklima) that "the African climate appears much more dangerous than it really is," and quotes the experience of Dr. G. A. Fischer, who during his medical practice in Zanzibar treated two thousand and fifty cases of malarial fever, of which four hundred were Europeans, and lost but one by death, who was suffering from another disease.

Unquestionably, human viability in all parts of Africa of natives as well as of Europeans can be very greatly increased by taking the most ordinary hygienic precautions which are common in all civilized communities, but are generally neglected, unknown, or unpracticed in the tropical regions where there is the greatest need; for what has been done in regions of India, and in Ceylon, where the climate was once terribly fatal, and in Algeria and Tunis, and in America, England, and Germany can be done in central Africa under intelligent guidance. "Drainage, clearances, and cultivation will eventually win the day

against malaria." In guarding against personal exposure and in the use of foods and drinks Europeans from the temperate zone, traveling in Africa, have very much to learn. "And the irrational life too often led by them is a powerful factor in the production of malarial disease."

A governor of Gambia declares that Africa must be the most healthy country in the world, for nowhere else do they drink so much: brandy and water is the national drink. In west Africa, says Mr. W. Reed, it is considered the proper thing to show no moderation in drink.

The habits of the cooler and dryer region can no more be safely indulged in than the clothing of that region can be safely or comfortably worn, and over-fatigue, thirst, and deficient, monotonous, and innutritious food must be carefully guarded against. In traveling in Europe or in America under similar conditions of exposure to sun, rain, and changing temperatures, especially at night, to bad, improperly cooked, and unaccustomed food, the muscular and nervous exhaustion would be as excessive, if not quite equally dangerous. The drink which may be beneficial in northern Europe is unwholesome, injurious, and dangerous in the tropics.

The intemperate use of alcohol, says Bonwick, is the great enemy of the European in these regions. Coffee and tea are the most refreshing as well as the safest drinks. A walk before the sun is high, simple and nourishing food, abstinence from fruit after dinner are required. In clothing, a belt of flannel or chamois, flannel shirts, cotton undershirts, drawers of mixed cotton and wool, and sleeping jackets of soft flannel should be worn, and beside these precautions an impassive and philosophic temperament should be cultivated.

It would appear that the Mohammedan prohibition of wine and their creed, so scrupulously observed, that "hurry is the devil," are not only sanative, but philosophical. In time the proper conditions for a healthy existence in the tropics will be more thoroughly and generally understood, and many of the old notions and theories be disproved by Europeans; and it is not unreasonable to predict that a race of acclimated Afro-Europeans will be permanently established upon the littoral plains, as northern Asiatic and other foreign races have been. As to the treatment of these miasmatic fevers, quinine and native

medicinal plants are much used as specifics and prophylactics. Dr. Clark is of the opinion that double-walled tents and mosquito netting (also Livingstone's experience) confer great protection. He declares that coffee and tobacco have also a decidedly prophylactic effect. B. G. Rohlfs, Eduard Mohr, and Schweinfurth, the German travelers, favored the use of prophylactics, and Schweinfurth claims that by using quinine daily in moderate doses he escaped the fever for a year in the Sûdan, while Hartmann is of the opinion that the frequent use of an extract of Peruvian bark with rum, wine, or cognac is a certain protection against it. Dr. Junker, another well-known German traveler in Africa, however, never suffered from dysentery or the serious form of malaria while there, but subsequently died from the effects of personal exposure in that climate.

VARIETY OF CLIMATES.

A moment's consideration will show us that a continent covering in extent 70° of latitude and 70° of longitude, with an average altitude of twenty-two hundred feet above sea, or twice that of the European continent (Dr. Joseph Chavanne estimates the mean altitude of the African continent to be 2,169.93 feet, that of Europe being 974.41 feet), and presenting large areas of plateau-land of from three to five thousand feet in altitude, culminating in the remarkable elevations of Elgon, Kenia, Ruwenzori, and the Kilima-Njaro, the latter estimated by Dr. Hans Meyer, a German engineer, to be 19,720 feet above sea, must possess every variety of soil and climate known to any region within the poles.

From these elevated plateaus in the northeast, in Abyssinia, in the Masai country, and in the Tanganyika region, the land falls toward the coast, as before remarked, throughout its entire length to a height of one or two thousand feet, to which generally succeeds the littoral plain, with an average breadth of one hundred and fifty miles.

We have, then, because of this gradual elevation of the continent toward the interior, for which a fall of one degree in temperature for every three hundred feet of elevation is reckoned, great differences in climate due to altitude, as well as latitude.

The mean temperature of the atmosphere decreases one degree for each degree of north latitude, and one degree for every three hundred feet of elevation above sea.

Mt. St. Bernard, at an elevation of 8,173 feet, in latitude 45° 50′ north, has the same mean temperature as the sea-level in latitude 75° 50′.

It will be borne in mind, however, that, as before suggested, the great enemy of the European is not the occasional high temperature, as the maximum of temperature is rarely, if ever, greater in the tropics than in the temperate regions.

Dr. E. Etienne, who carefully observed the temperature at Banana, in the mouth of the Congo, for seventeen months, found a maximum of but 93.60°, a minimum of 72°, with a high annual mean of 77.86°.

The highest temperature observed by Herr Büttikofer in nearly five years' residence in Liberia was upon the grass plains, in February, 1881, the tropical summer, when the mercury registered *in the sun* but 113° F.

In March, 1887, he observed the temperature of the atmosphere in the shade for eight days at one o'clock p. m. and found a mean temperature of 90.34° F.; at six o'clock p. m. a mean of 84° F.

The extremes of temperature were—maximum, 91.76° F.; minimum, 76.64° F., and the mean of the two records, 86.72° F.

In the temperate zone of the United States some of the maximum temperatures reached in the shade in the month of August are as follows:

Alabama	97° F.	Minnesota	100° F.
Arkansas	101°	Mississippi	105°
Arizona	117°	Missouri	102°
California	119°	Montana	110°
Colorado	106°	Nebraska	106°
Dakota	108°	Nevada	117°
Georgia	108°	Ohio	100°
Idaho	100°	Pennsylvania	100°
Illinois	98°	Texas	109°
Indian Territory	104°	Utah	106°
Iowa	104°	Washington	97°
Kansas	110°	Wisconsin	102°
Kentucky	100°	Wyoming	102°
Louisiana	101°	Arizona (July)	121°
Michigan	96°		

The absolute maximum observed in Augusta, Georgia, since the establishment of the weather bureau there is 104° F.; in Nashville, Tennessee, 104°; in Louisville, Kentucky, 105°; in Bismarck, 105°; in Des Moines, Iowa, 103°; in St. Louis, 106°; in Leavenworth, Missouri, 107°, and in Denver, Colorado, 105°.

Independent observers in New York city record a temperature in July of 104.67°.

An official observer of the Government in Death valley, California, latitude 36°, recorded a maximum of 122° F. for three successive days—June 30, July 1, and July 2, 1891. July values will in some cases exceed those of August. It is evident that for excessive temperatures, high or low, we shall not have to go to Africa.

The differences in the extreme temperatures are also found to be greatest in the higher latitudes and least in the lower. At Jakoutsk, latitude 62° 2′ north and longitude 127° 23′, Arago observed a difference of 158° 4′, while at Pulo-Penang island, latitude 5° 25′ and longitude 97° 59′, the difference is but 14° 1′!

In the tropics the mean temperature of December, January, and February does not greatly vary from that of June, July, and August.

In the Hawaiian islands, latitude 22°, the mean of the former months is 66° 4′; the mean of the latter, 76° 5′.

In Vera Cruz, latitude 19° 12′, the mean of the former is 72° 9′; of the latter, 80°.

In Para, Brazil, latitude 1° 28′ south, the mean of the former is 80°; of the latter, 81° 4′.

It will thus be found that the greatest enemies of the European in the tropics, after his own bad habits, are not the occasional excessive temperatures or the great differences in the extreme temperatures, but excessive humidity, combined with a continuity of unaccustomed temperature; or, in other words, with a high annual mean, and that the great advantage of the higher over the lower regions is in their greater dryness rather than in a lower temperature of the atmosphere.

Upon these elevated African plateaus Europeans can find congenial climates, where they can cultivate with success not only all the known cereals, vegetables, and fruits, but many indigenous ones, and also such subtropical products as rice, coffee, tea, sugar-cane, cotton, etc.

The world's invalids, singularly enough, when looked at in the atmosphere of recent prejudices, are now sent to recuperate their exhausted energies to south as well as to north Africa. For beauty of scenery and general excellence of climate, Cape Town and Natal approach perfection.

Upon the Karroo plains (a Hottentot word signifying "dry places") a day's journey from Cape Town, the climate is perfect and the air invigorating. The great Karroo, so called, is 350 miles long and from two to three thousand feet above sea.

It is most healthy for sheep, cattle, and horses; has an excellent water supply below the surface, and, when the grass fails, yields an excellent food supply in the wild sage.

AFRICAN TOPOGRAPHY.

From the Cape to the River Zambesi, on the east coast, there extends a territory of vast expanse, covering eighteen degrees of south latitude and comprising miles of fertile pastures most suitable for cattle and sheep, and thousands of acres of land capable of producing abundant crops of grain.

It abounds in magnificent forests of valuable timber and in mines of every valuable metal, with large deposits of coal to aid in their exploitation, and is inhabited at present by an insignificant population.

The mineral and agricultural resources of the Transvaal included in this region, says Lord Churchill, the most sanguine dreamer can hardly exaggerate.

It possesses everything which man can desire for comfort, luxury, and general prosperity—an excellent climate, a soil of exuberant fertility, and mines of gold, silver, coal, and iron, all of great richness, and, as of the Garden of Eden, it can be said that "out of the ground grows every tree that is pleasant to the sight and good for food."

From the basin of the River Zambesi, which is destined to be the great artery of South African commerce—the Mississippi of the eastern continent—the country rises to a plateau varying in height from two to eight thousand feet above sea, furnishing salubrious climates and one of the best fields in all Africa for European colonization.

On the southwest coast the great valley of the Congo stretches

its Briarian arms and fertilizing waters over many degrees of latitude and longitude to the great central African lakes, and, while it is the only estuary of real magnitude, it is obstructed by rapids and cataracts one hundred and fifty miles from the sea for a distance of two hundred miles.

In the north the three great divisions of the Sûdan, the Egyptian, the Central, and the Western, each possess an important river communicating with the populous interior—the Nile, the Senegal, and the Niger, the latter having as an important tributary the Bénué, the river of the future, which, extending to the rich countries of Baghirmi, Bornou, and Adamaoua, will eventually yield more important commercial results than the Niger itself.

POLITICAL AFRICA.

The central European nations almost without exception are taking part in the scramble for African territory, while the United States, where foreign territorial acquisition is not the teaching of political traditions, have serenely watched the contest; but territorial acquisition is by no means a necessity to commercial acquisition, and we hope to see our countrymen awake to a realization of the great and increasing importance of Africa to the commerce of the world.

By the following schedule it will be seen that our neighbors across the water appreciate its future value, and that in territorial acquisition by purchase or conquest they have excellent appetites, if occasionally feeble digestions. By the high-handed seizure of territory from weak and semi-barbarous peoples, with or without a mere pretense of right, they have earned the reputation, in the picturesque language of the native Africans, as "being people who speak with lead and buy with bullets."

There is a striking incongruity in our professions and practices as Christian nations, and it may well be asked if such unwarranted aggrandizement is worthy of great powers in the vanguard of the Christian civilization and altruism of the present century? and how it differs from the pagan belief in "the simple plan, that he shall take who has the power, and he shall keep who can"?

The partition of African lands among the European powers, which practically commenced after the Berlin conference in

1884–'85, has proceeded so rapidly, says Mr. White, that at the present time the whole of south Africa has been appropriated, while on the north of the equator very few internal boundaries are yet fixed.

Thus far pagan Africa is exclusively dominated by Europeans, while Mohammedan Africa remains essentially intact, for the simple reason that it cannot be so conveniently or easily "appropriated."

As usual, Great Britain has grasped a lion's share, and British Africa now includes Basutoland, the Cape Colony and its dependencies, the British South African territory, Imperial East Africa, Natal, the Niger territories, the protectorate of the coasts of the Niger, the Gold Coast, Lagos, Gambia, Sierra Leone, and Zanzibar. The English troops also occupy Wady, Haffa, Cairo, and Suakim, and they are not likely to escape English control. The territory absolutely controlled by England is estimated at 1,909,445 square miles.

The French Republican eagle is also constantly on the aggressive, and the territory under her control covers over 2,500,000 square miles and exceeds that of England. It includes Algeria, the Sahara, the Congo and the Gabun, Dahomey, the Gold and Benin Coasts, Senegal, Tunis, Madagascar, etc.

Germany holds Togoland, the Cameroons, East African territory, and Southwest African territory, estimated at 1,035,720 square miles.

Italy holds Massowah, covering 360,000 square miles, and the protectorate of Abyssinia.

Portugal controls in East and West Africa, the Cape Verde islands, Senegambia, Princes and other islands, Ajuda, Angola, Ambriz, Benguela, Mossamedes, and Mozambique, estimated at 774,993 square miles, while effete Turkey has to be content with an administrative control of Egypt and Tripoli.

The independent states in Africa are the Congo Free State, the Liberian Republic, Morocco, the Orange Free State, and the South African Republic, and from the Cape of Good Hope to the Zambesi, a distance of 2,000 miles, inhabited by but 500,000 whites and 4,000,000 natives, almost every form of government known to history, from an autocracy to a republic, may be found.

In round numbers the European possessions in Africa are estimated as follows:

England	2,000,000	square miles.
France	2,500,000	" "
Germany	1,000,000	" "
Portugal	800,000	" "
Spain	200,000	" "
The Congo Free State	1,000,000	" "
Italy (not including Abyssinia)	350,000	" "

In fourteen years, from 1876 to 1890, these powers have increased their control of African territory from 1,178,332 square miles in 1876 to 7,590,406 square miles in 1890, or a total of 6,412,406 square miles, and of the total estimated superficial area of Africa, 11,900,000 square miles, but 2,500,000 remain to be scrambled for.

POPULATION.

There are absolutely no data by which the population of Africa can be determined—150,000,000 to 200,000,000 have been assigned. Of these millions eighty to one hundred are claimed for the Sûdan, which includes Egypt to Darfour, Ouadai, Baghirmi, Bornou, the states of Sokoto, and the countries at the west of Haoussas to Senegambia, leaving seventy to one hundred millions to be assigned to the latter country, the Guinea coast, Abyssinia, and Southern Africa.

It may be noted that by a recent census the South African Republic claims 650,000 inhabitants.

AFRICAN DEVELOPMENT.

The Nile, the Congo, the Niger, the Bénué, and the Zambesi, as well as the numerous smaller rivers, will, when supplemented by the railway and canal, undoubtedly become excellent routes for penetrating the continent. What promises to be a great line of communication, the highway to southern Africa, is naturally formed by the Nile, and the lakes Albert, Albert Edward, Tanganyika, and Nyassa and the rivers Chiré and Zambesi to the coast. By building 300 miles of railway and utilizing these rivers and lakes, an economic route of 3,600 miles will be avail-

able for commerce. A company is already formed for the navigation of the Zambesi, and railways are projected and built in many directions. The railway from Cape Town to Johannesburg, in the mining region of the South African Republic, a distance of 1,020 miles, is already completed, and trains are making the distance in seventy-two hours. Governor Rhodes, of the Cape Colony, an excellent authority, predicts that the product of the Johannesburg gold mines will double in three or four years, consequent on the opening of railway communication.

On the 20th of June, 1892, a new section of the railway which is to unite the South African Republic with Delagoa bay, on the Indian ocean, was opened, and Pretoria, its capital, is now wedded to the sea. A Belgian company has been formed to build a railway from the same bay to the Silati country, in the northeast Transvaal, which is rich in gold. A railway already connects Port Natal with Pieter Maritzburg, in the mountains.

In German East Africa the railway will shortly be extended to Victoria Nyanza from the coast, and 75 miles of the railway from the port of Beira, at the mouth of the Pungue and near the mouth of the Zambesi, to the Manica gold fields, has been constructed, and it was thought would be opened in July, 1893. This is destined to be an important line in the continental traffic. France, in Algeria and the Senegal, and Belgium, on the Congo, are pushing the railway wherever practicable.

The telegraph frequently precedes the railway, and the South African Company have completed a line of four hundred miles, which traverses the territory of British Bechuanaland and which will form a link in the great projected line which is to unite Alexandria to Cape Town, and which will traverse Egypt, the Sûdan, the region of the great lakes, and the East Africa Company's territory, German East Africa, the Portuguese possessions, Mashonaland, Khamas country, Bechuanaland, the Transvaal, the Orange Free State, and Cape Colony.

It is reported that contracts have already been signed for more than half the distance, and that within a year Europe, Africa, and America will be joined by an electric cord in civilization and commerce.

The English government has recently announced that a topographic commission will be sent to study the routes of several lines of railways in the Gold Coast colony.

Owing to the peculiar character of the African littoral plain, which has already been described, the interior is naturally protected against foreign colonization and conquest by the shallowness and obstructions of its rivers, which, in breaking through the rim of the inland plateau to reach the sea, leave cataracts and rapids in their wake.

The number of navigable rivers compared with the immense territory drained is therefore extremely small; and in large areas the railway or the public road will be absolutely necessary in establishing and maintaining permanent and economical communication with the interior.

Of the two methods, the railway is the most practicable, because of the difficulty in maintaining a public road in the luxuriant vegetation and heavy rainfall of the tropics, and because of the presence in many parts of the Tsetse fly, the enemy of all beasts and cattle, for whose poisonous bite no antidote is yet generally known, and whose long, sharp proboscis will draw blood through a canvas hammock. This fly is considerably larger than the common house fly and rather more slender in body. Its abdomen is marked with transverse stripes of yellow and dark chestnut, fading toward the center of the back, and giving the impression of a yellow stripe along it. The eyes are purplish-brown, and the wings of a dusky, glossy brown color. Its proboscis measures one-sixth of an inch in length, with which it sucks and poisons the blood without a sting. Fortunately its habits are peculiar; it rests at night from its labors, and confines itself to certain districts, slight elevations and patches of soil. Goats, it is claimed, do not suffer, but all cattle and horses are destroyed by it.

Schweinfurth asserts that in the Sûdan camels are never seen, and that horses and mules are only used as signs of luxury and for display, the ass alone managing to eke out an existence. The elephant, he declares, is the only available animal by which Central Africa can be opened to civilization.

The report of the committee of the African section of the Liverpool Chamber of Commerce will apply not only to Sierra Leone, but to many other parts of the African continent. The committee concludes that the best means of developing the commercial resources of that colony, and of connecting Freetown, its capital, with the hinterland and the neighboring territories, is

the establishment of a railway, and that without it, it is useless to expect rapid progress; and it might have added, or to hope for the civilization of the West Coast.

The Republic of Liberia from its birth to the present moment has suffered politically, socially, and commercially from the absence of railways or public roads reaching to its interior, developing the hinterland and binding the country together. It is not the province of this paper to describe in detail the railway development in Africa; it can be easily learned elsewhere. It will suffice to say that wherever the European settles in Africa he builds a railway or establishes a steamship line to maintain his communication with the coast or interior, and railways, either completed, undertaken, or projected, may now be found in all parts of the continent.

"It is safe to predict," says Mr. Mathers, "that before the close of the century it will be possible to take a circular ticket at Messrs. Cook & Sons' bureau in London which will frank you to the Victoria Falls via the Pungue railroad or the Zambesi steamers, and returning by the Central South African railroad to Cape Town, land you in England within three months of your departure."

France, Belgium, Germany, and England rival each other in their enthusiasm for African conquests, treaties, purchases, concessions, explorations and exploitations, and in material development. Under French enterprise a tremendous impetus has been given to agriculture in Tunis. The exports of cereals from that country increased from $2,500,000 in 1886 to $5,000,000 in 1891, and the wine production from 398,000 gallons in 1888 to 2,800,000 gallons in 1891, and 3,700,000 gallons in 1892. There have also been established fifty-six European olive-oil mills. A recent New York journal remarks that nothing is more remarkable than the vast contrast that exists between the noise, the froth, and foam of politics in France and the quiet, silent, determined way in which every enterprise connected with the defense of the Republic or the prosperity of its colonies is undertaken and carried out. One of the most noteworthy of these is the construction of the harbor and fort of Tunis, which have just been completed by the French government. The capital of Tunis is separated from the sea by a lagoon twelve miles long, which was not even navigable for small steamers, while the port

itself, La Goulette, was so shallow that passenger boats had to remain at a distance of about three quarters of a mile out at sea. Within the short space of five years France has entirely metamorphosed this state of affairs, and the largest steamers can now advance between two superb jetties, lighted by electricity, and moor alongside the newly constructed quays, which at present constitute the finest ornament of the city. At various places in the great desert south of Algiers water, pure, sweet, and fresh, has been obtained by digging wells from 160 to 200 feet in depth, a discovery which is possibly destined to make the wilderness to blossom as the rose, and once again to teem with its wonted life, to solve the railway problem, and to change the physical, commercial, and social character of a great part of Northern Africa.

Everywhere, under the domination of the restless energy of the French character, whether in Algeria, on the Congo, or Senegal, private enterprise follows closely upon the public spirit of adventure and aggrandizement. To satisfy this commercial ambition The Musées Commerciaux have recently been created, and the governors of the French territories have been instructed to forward to the home government all information interesting and important to the industries and commerce of France; and for the same purpose the Compagnie Francaise de l'Afrique Centrale has been organized in Paris, which has for its special object the importation and exportation of African products.

Belgium, not satisfied with founding a state and leading in the crusade against the slave trade, is active in exploration, and has recently sent a successful expedition to Katanga, a country lying to the southeast of the Congo State, bounded west by the lakes Tanganyika, Moëro, and Bangouéolo, and traversed from north to south by the rivers Loualaba and Louapoula, and watered by numerous smaller streams and sheets of water.

"It is a land," says Capello, "of astonishing fertility, abounding in rich minerals and an infinite variety of natural products, lying over 4,000 feet above sea, and, beyond doubt, is at the moment suitable for European settlement."

The country about Bounkeia is said to be rich in copper, which has been mined in a crude way for centuries, and furnished that metal for all the Congo country. The natives make a copper currency, collars, and various cooking utensils, hammered in the usual Arab fashion.

This exploration of Katanga is one of the most rapidly conducted, intelligently conceived, and successful in contributing to our geographical knowledge of any in recent years.

To the west of Katanga, within the territory of the Congo State, are three important tributaries of the Congo—the Kassaï, Sankourou, and the Lulua, all larger and broader than the Escaut, at Antwerp. Several important factories or trading stations have been established upon these rivers—one by an American from the United States, who reports finding caoutchouc in great abundance, all the creepers of the forest yielding the precious liquor. This American had made many excursions into the interior and, in answer to an inquiry, replied: "It is a splendid country."

The exploitation of caoutchouc in the Congo country, which two years since was quite small, has grown considerably, proving the proverbial commercial instincts of the native African and his desire, when protected and at peace, to enter into better commercial relations with the Europeans. It is found that in a state of peace these relations are extended to enormous distances, and the tribes of the Lulanga for this purpose come nearly to Stanley Pool, a distance of three hundred and sixty miles from their homes.

Germany, with newly born zeal for colonial expansion joined to Teutonic determination and persistency, has entered the African field and is making her powerful influence felt in the Southern as in the Northern continent. In the March session of the Reichstag 2,500,000 marks were appropriated for the repression of the slave trade and the protection of her interests in East Africa. The government has also authorized the Anglo-German South African Company to open the mines of their Southwest African colony, and has accorded to Messrs. Scharlach and Wichman lands and mines in Damaraland.

In German East Africa the Ou-Sambara Company has made choice of thirty-six miles of coast in a fertile and well-watered country, where they will cultivate the Bourbon coffee, which thrives well there, and later on will build a railway to Tanga, a port on the coast.

An expedition has also been organized for penetrating the hinterland of the Cameroons, with the purpose of taking possession of territory which the French and English have in mind.

Dr. Bauman, who was sent out by the German East African Company to explore the country between Kilima-Njaro and the Lake Victoria, which was supposed to be an arid desert, and to report upon the possibility of a shorter route from the lake to the coast than that of "Mpwapwa-Tabora," reports that, instead of a desert, the country is an extremely healthy elevated plateau, where his expedition suffered more from cold than from heat, and which is entirely free from fever.

As we have seen, private enterprise in Africa does not lag behind that shown by government leaders. The German and Dutch factories and plantations are numerous along the coast and are annually increasing in number, and foreign and locally non-indigenous tropical and subtropical plants from Texas, Java, Ceylon, and Bombay are being introduced; but in exploitation and agriculture, as well as in all other departments of material development, England leads all other nations. Her influence is the dominating one in all southern Africa, and her colonies, her protectorates, and her great commercial companies cover the greater part of the immense territory stretching from Cape Town, her strategic stronghold in Africa, to Zanzibar on the east, while she divides with Portugal, France, Germany, and Liberia the West Coast from the Cape to the Senegal, including 50° of latitude. The history of the Anglo-Saxon conquest and development of southern Africa would alone require a volume.

MASHONALAND.

One of the most recent fields for the display of exuberant British energy is Mashonaland or Makalangaland (the land of the people of the sun), which, in the opinion of M. Selous, is a magnificent, well-watered country lying from 3,000 to 6,000 feet above sea, larger in area than the United Kingdom, and better adapted to the cultivation of wheat, oats, barley, and similar products than any other known region of Africa.

The commission of leading South African farmers, which left Cape Colony in May, 1891, for the purpose of examining and reporting upon new fields for agricultural enterprise, reported that many thousands of square miles of Mashonaland are well adapted for colonization by Europeans. The healthiness of the country, after making due allowance for the conditions preva-

lent in all newly opened regions, has been established beyond a doubt. The great population once occupying this territory is now nearly exterminated by internecine wars, and hundreds of square miles of this prolific region are left without a single permanent habitation or inhabitant.

The future of the great Mashona gold-fields is also well assured, and many are of the opinion that they will prove richer even than the Transvaal mines, and that Mashonaland possesses not one, but several Wittewatersrandts. Fresh finds of the metal are of daily occurrence, notably in the districts of Mazol, Mogounda, Victoria, and about Fort Salisbury.

Notwithstanding Lord Randolph Churchill's doubts of the mineral wealth of the region, it is commonly reported in London that he and Colonel North have together formed a syndicate for working mines in the Transvaal and Mashonaland, and that Lord Churchill personally holds eleven thousand of the bonds of the company. The Willoughby Mashonaland Company has also recently been formed, with a capital of $2,650,000, for the purpose of purchasing and exploiting mining concessions in that country.

From other authoritative sources it would appear that Lord Churchill's opinion of the climate and the agricultural outlook is equally liable to impeachment; it is directly controverted by M. Selous, already quoted, and by Mr. Bent, who specially investigated the region and who, in his report to the Royal Geographical Society of London, says: "It is a magnificent country, finely watered, and in parts in no way inferior to any in South Africa."

Lord Churchill, however, specially commends the district about the Lundi river as "magnificent, hilly, well watered, sweet grass, and capable of growing all sorts of produce." The indictments of unhealthiness, so frequently made against countries newly settled by Europeans, should be accepted with considerable reservation. Most new countries when first opened to settlement and cultivation are unhealthy; their continuance as such depends, however, in a great measure upon the character, the intelligence, the occupations, and general culture of the population occupying them.

Mr. Blodget remarks (Climatology of the United States) "that where the greater constants remain the same (the mean tem-

perature and mean rainfall) local humidity may be decreased or dissipated by draining lands or removing forests, and the force of the natural climatological excitants to malarious disease be much reduced."

Malarial fever was as endemic in Massachusetts at its settlement as it is in many parts of Africa; and malarious conditions were very general and very severe in New England and New York for many years; yellow fever was also once epidemic as far north as the coast of New England; but as the land was cultivated and drained and the climate better understood, as the food increased in quantity and improved in quality, when greater attention was paid to public and private hygiene, and a better knowledge obtained of therapeutics, these diseases gradually and finally disappeared, and in the beginning of this century were entirely unknown in Massachusetts and New England, and in 1846 Dr. Holmes was able to sing:

> "Cold are thy skies, but ever fresh and clear;
> No rank malaria stains thine atmosphere."

But our criminal carelessness in polluting the streams, saturating the soil with sewage, and infecting the water-supply has caused malarial disease to reappear, and in 1881 forced Dr. Holmes to confess that "what I claimed for New England in 1846 cannot be affirmed in truth-telling prose in 1881," showing that in many instances, if not in every particular case, the control of natural climatological conditions is completely in man's power. What has been done in America, in Germany, in India, and in England is possible in a very large portion of Africa. "In fact," says Dr. Carl Peters, "parts of the 'Dark Continent' that fifty years ago would have been looked upon as utterly unfit for permanent occupation by civilized human beings have been conquered to their uses by hardy and energetic settlers." But whatever the climate or the soil of Mashonaland or of any other part of Africa may be, English commercial enterprise, Anglo-Saxon pluck, and the universal greed for gold will soon settle the country, and its products of diamonds, gold, silver, copper, lead, iron, and platinum will establish its commercial supremacy over all other continents.

The gold districts, which at the end of the first year (1891) attracted prospectors to this region, were six in number: Manica

(Umtali), Hartley Hill (Umfuli), the gold reefs on the Mazoe river, Lo Magondi, Kaiser Wilhelm, and Concession Hill. The ancient miners of Mashonaland, however accomplished in the useful arts, did not exhaust its mineral wealth, and, beside gold, it offers to the miner rich rewards in silver, copper, blende (native sulphuret of zinc), tin, antimony, arsenic, and coal.

British Zambesi and Nyassaland comprise the whole region north of the South African Republic and the twenty-second degree of south latitude and south of the Congo Free State, and having for eastern and western boundaries Portuguese and German territories. The River Zambesi, which serves as a line of demarcation between tropical and subtropical Africa, divides the territory into two portions, North Zambesia and South Zambesia. The southern region, which includes Bechuanaland, Matabeleland, and the Khamas country, covering over 400,000 square miles, was, in 1889, granted to the British South African Company. Of this territory, which is three times the size of the United Kingdom, Matabeleland is the most valuable portion, and, like Mashonaland, is rich in gold and other minerals. Various companies have been organized in London to develop this vast territory; among them are The Gold-fields of South Africa Company, The Bechuanaland Exploration Company, The Exploring Company, and The United Concessions Company. A new English company has also been formed to develop Portuguese East Africa, which is in danger of becoming, from an economical point of view, Anglicized, since the great territorial concessions of 1891, which have reduced the field of the Mozambique administration from eight to three districts. The new company is named "The United Gold-fields of Manica." It has obtained the rights of the "Gold-fields of Manica Company," which they had previously obtained of the Mozambique Company in 1888, to important placers at Massikessé. An English syndicate has also obtained of the Portuguese government the concession of 6,000 acres of mining lands in the province of Sofala. The Portuguese are, however, not entirely neglectful of their own territory, and a company has been formed at Lisbon, called the Nyassa Company, with a capital of $5,000,000, to which the government has accorded the concession of the railway from Lake Nyassa to the coast for ninety-seven years, and the exploitation for thirty-five years of the territory bordering on the lake.

THE GOLD OF THE TRANSVAAL.

The Boers, in the course of an ángry and checkered career, have for the time settled their South African Republic across the River Vaal.

"Probably in the history of mining," says Lord Churchill, "no gold-field more important or more productive than Witte-waters Randt, in this Transvaal country, has ever been discovered"—a district lying 6,000 feet above sea and 300 miles to the southwest of Pilgrim's Rest, where the first ventures in gold mining were made in 1873, which have been followed by such remarkable development.

Lord Randolph Churchill's statement of the richness of the region is remarkably established by the daily developments. In 1892 the monthly output had risen to 86,000 ounces. More recent accounts estimate the present output at 110,000 ounces per month, a result reached by a more scientific treatment of the "tailings." Mr. Alfred Beit is of the opinion that the gold exports from the Randt will soon reach 10,000,000 ounces per annum. This will not appear an exaggeration if the estimates made by Mr. Scott-Alexander, based upon some experimental borings in this field, have a reasonable approximation to the truth. He considers the area of the auriferous deposits in this one region to be 12,580 square miles, and the value of the gold to be *eight billions of dollars!*

The annual product of the Transvaal, as shown by the exports of gold through the Cape Colony and Natal for the nine months of 1892, was $16,132,185, an average of $1,792,465 monthly, and equivalent to a total for the year of $21,509,580, or very nearly the total statistical production of all Africa for that year.

The output of gold in California was in—

1889	$12,587,000
1891	12,600,000
1892	12,000,000

Africa is unquestionably destined to be the great gold-producing continent of the world. Its estimated production of the precious metal was in—

1889	$8,586,600
1890	9,887,000
1891	14,199,600
1892	22,069,578

an increase of $13,482,978, or 156 per cent. within four years.

The product of the United States was, in 1892, $33,000,000; but in the opinion of experts the product of Africa, if not in the current year, will very soon exceed that of the United States, and the primacy in the production of gold will pass to Africa, and the United States and Africa together will furnish more than one-half the product of the world and cause the bugbear of a "gold famine" to vanish.

Johannesburg, in the center of this great mining district, 35 miles from Pretoria, the capital of the South African Republic, is an active, busy, thriving city of 45,000 inhabitants, mostly Europeans, with railways, theaters, electric lights, and all the appliances and conveniences of modern civilization, set down and established where seven years ago the springbok and hartebeeste roamed at will.

"For sixty miles in one straight line," says Day, "stretch the headgears and working machinery of hundreds of mines as closely packed together as a row of city houses."

Of all the mines in the region, the Robinson mine is the most remarkable for size, average richness of ore, enterprise, method in management, and capital invested. Bought originally for $100,000 in 1888, it was worked with a capital of $13,500,000, and in 1892 produced 12,000 to 14,000 ounces a month, or above $3,000,000 annually. Four hundred Europeans and seventeen hundred Kaffirs are constantly employed in it. The other large mines in the Randt are the Ferreira, Langlaagte, City, Suburban, and Wemmer. At Pilgrim's Rest, the "Sheba" mine is said to average an output of $50,000 monthly.

Lord Churchill remarks that this region appears to be a most promising field for young mechanics and miners, who would here obtain high wages, free rent, and enjoy a magnificent climate.

The Orange Free State, the sister Republic of the Transvaal, has recently given to the world, if the accounts are trustworthy, the largest known diamond, weighing in the rough no less than 970 carats, and estimated to weigh, when cut, 500 carats, or three times the weight of the "Imperial." It was found in the Jagersfontein mine, and the fabulous sum of $2,500,000 is said to have been offered for it. At Kimberly, in the Cape Colony, the diamond is everything. A capital of $40,000,000 has paid 5½ per cent. and an annual dividend of 20 per cent. Thirteen hun-

dred Europeans and fifty-seven hundred natives are employed in the mines upon wages varying from 83 cents per day for native laborers to $5 or $6 per day for European engine-drivers and miners. The agricultural wealth of the Transvaal will some time equal if not surpass its mineral wealth. "Both in the Transvaal and Bechuanaland the amount of live stock is very considerably less than the area and soil are capable of sustaining, and it is scarcely an exaggeration to assert that if all other sources of the meat supply should be exhausted the African Veldt could produce sufficient to fill the stomachs of the starving world."

The region to the westward of the Zambesi and Chiré, and reaching to the western shore of Lake Tanganyika, is also destined to become one of the most productive in agriculture and minerals of any in South Africa. This huge territory is under the control of a group of companies, the Katanga, Central African, Zambesi, and the Flotilla. Its different elevations give great diversity of climate and productions. Its forests furnish ebony, teck, and pine, and its fields all sorts of tropical and subtropical products. One Scotch firm has under cultivation 1,000,000 coffee trees in excellent condition.

In the Makanga country the natives make bread of wheat grown on the spot, and cultivate the sugar-cane, while the output of oil seed and orchilla weed would be practically illimitable, and labor is cheap and abundant. The country is well adapted for European colonization. The triangle between the Chiré and the Zambesi is in the control of the Central African and Zambesi companies, and is, above all, rich in gold. Nearly all the gold and silver money of Mozambique comes from this region, which is a part of the great interior plateau of Central Africa—a rolling, undulating country, wooded, well watered, and suited for agriculture and having a salubrious climate. In the region are already many plantations of Liberia, and Mozambique coffee, and the sugar-cane and cinchona, the orange, mangoe, and pine-apple abound.

At Tete, on the Zambesi, extensive beds of coal have been discovered, which will have an important influence in developing the country. The Natal and Transvaal coal-fields are already well known.

AFRICAN COMMERCE.

The exact value of the exterior commerce (exports and imports) of the African continent is difficult to obtain, as its volume is so imperfectly recorded by some of the countries interested in it.

England, although taking the second rank in the extent of her territory, holds the primal place in commerce, as well as in political influence.

The estimated value of the African trade to the countries most largely interested was in 1890, 1891, and 1892 as follows:

England (1891)	$194,000,000
France (1891)	131,600,000
Germany (1890)	19,000,000
Belgium (1891)	11,000,000
United States (1892)	10,000,000

The trade relations of The Netherlands, Portugal, and Italy with Africa are also of considerable volume.

In the ten years from 1880 to 1890 the African trade had increased with—

England	$21,000,000, or 12+ per cent.
France	19,000,000, or 15+ per cent.
Germany	14,000,000, or 263 per cent.
United States	136,000, or 1¾ per cent.

and in one year, 1890, Belgium increased her importations from Egypt 200 per cent.; from the Congo Free State, 89 per cent., and from Algeria, Morocco, Tunis, and Zanzibar, 6 per cent.

Our own feeble exhibit is made more apparent by the statement that our African trade since 1860 has actually declined. The percentage coming from all Africa of our total importations was in the year—

1860	1+ per cent.
1892	.64 per cent.

Of our total exportations the percentage going to Africa was in—

1860	.96 per cent.
1892	.49 per cent.

In round numbers, a decline of one-half in the thirty-two years.

The ratio of the African trade to the whole volume of the exterior commerce of the different countries is as follows:

1890. England, total exports and imports	$3,644,736,535
With Africa	190,340,000
or 5.25 + per cent.	
1890. France	1,986,494,879
With Africa	134,603,000
or 6.70 + per cent.	
1890. Germany	1,920,750,000
With Africa	19,000,000
or 1 + per cent.	
1890. United States	1,647,139,093
With Africa	7,935,179
or .48 per cent.	

It may be noted, in passing, that England's trade with British India in 1892 was valued at $289,780,000, or a fraction less than $100,000,000 greater than with Africa, a disparity which is likely to be gradually reduced if not to disappear.

We may learn from these figures the enormous stride Germany has taken in African affairs, territorially and commercially. The steadily increasing interest of England and France, the rising importance of Belgium, and, in contrast, the utterly humiliating and insignificant position of the United States in African commerce. Our trade with that continent instead of increasing, as by all the traditions of our commercial history we had a right to expect, has, as we have seen, actually declined one-half; from insignificance in 1860 to greater insignificance in 1892.

T. Risely Griffin, colonial secretary of Sierra Leone, before the Royal Colonial Institute of London, said: "Very few of our commercial men are alive to the advantages which the West Coast of Africa presents for trade; the few who have recognized its importance are making large profits."

This gross neglect of a great commercial opportunity on our part it is the purpose of this paper to point out. To the layman in mercantile affairs even the present imperfectly estimated volume of Africa's external trade (exports and imports) with the rest of the world, fixed at $550,000,000, is astounding, especially so when there is good reason for the belief that it is far short of its actual volume. In 1880 it was estimated at $373,000,000; but in recent years it has been increasing more rapidly, an aug-

mentation that is likely to be continuous. In 1891 this trade was allotted to the different countries and possessions as follows, in round numbers:

To British Africa	$169,000,000
" French Africa	130,000,000
" German Africa	8,000,000
" Italian Africa	3,000,000
" Portuguese Africa	15,000,000
" Turkish Africa	147,000,000
" Congo State	1,000,000
" Liberia	1,000,000
" Morocco	18,000,000
" Orange Free State	13,000,000
" South African Republic	40,000,000

AFRICAN PRODUCTS.

The variety in the natural products of Africa is enormous; and if we add to her indigenous plants those which the extraordinary range and variety of her climates enables her to naturalize and adopt from all other climes, the agricultural possibilities of Africa are overwhelming. Only by a somewhat detailed account of her products can any correct idea be formed of their present range. Beginning with—

Algeria, we find among her exports a variety of vegetables: Alfa (a species of spaterre), jute (Esparto grass), tanning bark, fruits, forage, crin végétal (vegetable hair), olive oil, crude wax, coral, seed grains, tobacco, roots of aquatic plants, metals (iron, copper, zinc), chemicals (tartrates), and its product of wine in 1891 was 4,058,000 hectolitres (107,537,000 gallons.

Tunis exports native cloth made from Esparto grass.

Senegal exports groundnuts, exotic gums, Touloucouna seeds (an oil seed used in soap-making), caoutchouc, palm nuts, ivory, and feathers.

Gambia exports groundnuts, hides, wax, kola nuts, maize, caoutchouc, and palm kernels. The interior tribes are unsubjugated, and there are no railways or telegraphs.

Sierra Leone exports beni or sesame seeds (*Sesamum indicum*), an oil seed which is identical with the "gingelly" or "til" seed of India; gum arabic, which is obtained from an acacia (*senegalensis*), found throughout the Sûdan and is the best known

to commerce; gum copal, found here not only in the living tree, but in fossil deposits; kola nuts ($200,000 annually), indigo, cotton, cocoa, coffee (*Coffea stenophylla*, native, and claimed to have a superior flavor), tobacco, woods (camwood, barwood, redwood, ebony, and mahogany). Total external trade, $3,500,000 annually.

Among the other products of Sierra Leone, indigenous or cultivable, are rubber trees and vines, cubebs, black pepper, vanilla, gambier, ginger, cardamoms, sugar-cane, cinnamon, nutmeg, pimenta, arrow-root, agusi (one of the constituents of the far-famed palavar sauce), a variety of oil-yielding plants, a great number of textiles and dye-plants and gums, besides an infinite variety of cereals and vegetables.

In minerals Sierre Leone is not rich, and can only boast of large deposits of iron and a belt of titaniferous iron. Unquestionably, all these products are also indigenous and cultivable in Liberia. The Sierra Leone people, like many Liberians, are disinclined to work in the fields, the presence of a large aboriginal population causing such industry to be associated with slavery, and they prefer lighter occupations, such as trading, peddling, huckstering, and politics. The adage "Time is money" is unknown in any part of Africa.

The present population of Freetown, the capital, is estimated to be 75,000, and such is its heterogeneous character that sixty or more native languages can be heard in its streets. Koelle, in the neighborhood, was enabled to glean from the mouths of released slaves two hundred vocabularies.

THE GOLD COAST COLONY.

'Its interior, like that of Sierra Leone, Liberia, and other African coast countries, is not defined, and is in great part unknown. Its name is derived from the presence of gold, which was known in very early times, the mining being described by Herodotus. Until the discovery of California, it was the principal source of supply; from Elmira (St. George), on the Gold Coast, in the seventeenth century, the gold export reached $3,000,000 annually. Sir R. Burton cites an estimate of the production since A. D. 1471 as high as $3,500,000,000. From 1866 to 1880 the exports averaged $600,000, and from 1888 to

1890 $470,000 annually. As indicating the wealth of the country, it is stated that the present king of Gyaman has gold steps to his bed, and the King of Ashanti is said to guard his favorite fetish in a large gold box. A recent statistical writer, James Bonwick ("The British Colonies and their Resources"), declares that upon the Gold Coast "there are still magnificent deposits of auriferous earth which could be worked by the hydraulic process," and that "Yorima, where King Blay works, is said to be 'choke full of gold.'" The chief gold districts are Wasa, Akim, and Gyaman. There are at present no railways and few public roads on the Gold Coast. Beside gold, it exports palm oil, palm kernels, caoutchouc, monkey skins, ivory, kola nuts, and camwood.

Lagos is one of the largest towns on the west coast, with a population of 32,500. In the interior, and tributary to it, are the large towns of Ibádan and Illori, with 150,000 and 60,000 inhabitants respectively. Its external trade in 1890 amounted to $5,500,000. In gin and rum it has a large trade with Germany and exports palm oil and palm kernels, and is without railway communication, public roads, or telegraph lines.

The Protectorate of the Coasts of the Niger, formerly known as the "Oil River Protectorate," occupies the coast line from Lagos to the mouth of the Rio del Rey and has an extensive trade in oil, kernels, ivory, etc., which is in the hands of the Royal Niger Company. For the year ending in August, 1892, its exterior trade was valued at $7,500,000.

THE LOWER NIGER.

On the Lower Niger the native towns of Onitsha, Abbo, Egga, Idda, and Lokodja hold weekly markets, which are attended by enormous crowds, and furnish a great variety of natural and manufactured products, such as palm oil, indigo, cochineal, cotton, native pottery, sheep and goats, shea (Galam or Bambuk butter, a concrete oil expressed from the seeds of the bassia parkii and used by soap-makers) sesame, (beni) before mentioned, to which it may be added that its mucilaginous leaves also contain oil. This plant is also indigenous in Central and East Africa at a height of 5,000 feet. Egga has a special reputation for its stuffs and potteries, the Mussulman industry show-

ing itself under a variety of aspects, particularly in dyed and ornamented ostrich skins, arms, and fine metal-work; also in embroidery in silk and metal-work. Ivory is very abundant, and is sculptured with great taste. The whole region is an extremely rich one, the productiveness of the Lower Niger is enormous, and all the indigenous plants known to tropical climates, including caoutchouc and pepper, abound. Upon the River Bénue, a tributary of the Niger, before mentioned, there is a large Mussulman population. Ivory is abundant; a mine of amethyst is said to exist, with copper and antimony in profusion. Gold is to be found at Yola, and at Oucebhehon is a lead mine rich in silver ore. In all the villages of the Niger and the Bénue there is a commencement of culture and of industry, and tobacco, cotton, rice, yams, maize, and millet are raised in abundance. The women of the region spin and weave the cotton, dye it with beautiful colors, and sew it with banana fiber. In the commerce of the country, the exchanges average two-sixths in stuffs, one-sixth in glass-bead-work and small mirrors, one-sixth in salt and tobacco, one-sixth in gin, and the last sixth in guns, powder, sabres, pottery, etc., and of all these France produces scarcely anything; the arms coming from Belgium, the spirits from Holland, and the cloths from England. The articles used for exchanges on the Lower Niger and in other parts of Mussulman Africa are of—

Cloths and Clothing.—Printed cotton, white satinets, turbans, foulards, madras (silk and cotton), pagnes (cotton garments reaching from the waist to the knee), calottes (small visorless caps of skins or cloth), silks (of bright colors), satin stripe, blue baft (cotton cloth), drawers of cotton, chemises (for Mussulmen), sandals (for Mussulmen), body linen (for men and women), light cloth clothing (for men and women).

Liquors, etc.—Rum, tobacco (in packages of ten or twelve leaves, used as currency), gin (in cases of 12 bottles), snuff, common perfumery (of which the natives are very fond), vermouth, absinthe, and wine (in cases).

Foods and Supplies.—Sugar, coffee, conserves, rock-salt, candles, and matches.

Miscellaneous.—Pearls, iron spoons, flint guns, powder, poignards, little baguettes (or batons of copper, red and yellow), coral (real and imitation), and cauris, large and small shells

which have been used as currency in the Sûdan from the earliest times, as in China, India, and Arabia. Ordinarily on the "Slave Coast" they have a value as follows:

8,000	cauris	= $1.00
2,000	"	= .25
200	"	= .02½

A sack containing 20,000 would represent $2.50 and weigh seventy-five pounds. The enormous weight of this money renders large transactions extremely inconvenient.

The cauris are not only current money, but are in a way the elements of Negro calculation—20,000 cauris equal one sack, and two, three, or four sacks of men represent forty, sixty, or eighty thousand persons.

"The Negroes," says L'Abbé Bouche, "are still ignorant of written numeration and add cauris to cauris, as our ancestors added stone to stone (calculi = little stones; hence the word calculate), and when they have formed a 'tas,' or 200, they count by 'tas' to 2,000, or a 'tas' complete."

The Cape of Good Hope, as before remarked, has an agreeable climate, and once the sanatorium of Bombay and Bengal, has become the health resort of the world. Its mean maximum temperature is 71.9°; mean minimum temperature, 52.9°, and its average rainfall, 23 inches annually. Its external trade in 1890 was valued at $102,000,000, and its principal exports were of—

Diamonds	$21,000,000
Gold (Transvaal)	2,000,000
Copper ore	3,500,000
Wool	11,000,000

The export of wool has grown from one and a half million in 1850 to its present volume. Its other products are coal, manganese, crocodolite (an asbestiform material), iron, lead, zinc, kaolin, marbles, wine, mohair, feathers, hides, and many valuable woods. Vulcanite and ebonite are produced from the sap of the euphorbia.

Sea-fishing is an inexhaustible and undeveloped industry at the Cape, and is capable of indefinite expansion. Its product of grains in 1891 was 200,000,000 bushels, and of tobacco 11,000,000 pounds.

The production of the four diamond mines at Kimberly was, in the year 1890, $19,000,000, and the yield of the Kimberly mine alone has, in fourteen years—1871 to 1885—probably exceeded $100,000,000 in value. The total export of diamonds from the Cape from the date of their discovery until the present has probably exceeded $350,000,000. The annual expenditure in procuring the product is now $5,000,000, and the exportation is limited to four or four and a half million of carats annually to prevent a depreciation in price. The advantages to the Cape Colony and to the commercial world at large of the diamond industry are the employment of native labor and the demonstration of the native's willingness to work, which so many still doubt, the teaching of habits of industry, and the steady advance of civilization into hitherto unexplored regions.

The sweet wines of Paarl, remarks Lord Churchill, rival those of Constancia. The inferior quality of much of the Cape wine, upon the authority of the Imperial Institute, is due to want of skill in its manipulation, as has been the case with our California product. Mr. Noble shows that the vine is more productive in South Africa than in any wine-growing country of the world, and the grape is of high quality.

The three railway systems of the colony are in successful operation, and several new lines are contemplated and in process of construction. Many thousand miles of telegraph lines are also in use.

Namaqualand already exports copper ore to the value of three and a half million dollars, and in Griqualand crocodolite has been discovered.

Bechuanaland is a table-land, from 4,000 to 4,500 feet above sea, and possesses a remarkably healthy and dry climate. Gold has been discovered, and lead, tin, silver, and iron are known to exist. It has a number of fairly good roads, telegraph wires, and a railway to Kimberly and Cape Town.

Natal is a land of hills and valleys among the spurs of the Drakenburg range, whose various peaks rise to a height of from 6,000 to 10,000 feet. The uplands lie 6,000 feet above sea, and are utilized for sheep-raising, the midlands producing maize and other cereals. Natal has three distinct districts or areas of elevation—the coast lands, the midlands, and the highlands—and furnishes a capital illustration within a comparatively small

territory of the difference between the "mathematical" climate, which is expressed in latitude, and that which depends upon altitude and various other factors which are often found together in all parts of Africa. Natal has seaports upon the Indian ocean, and good public, rail, and other roads, but no navigable streams. Its principal port is Durban or Port Natal.

A correspondent of the "Mouvement Antiesclavagiste" describes the city as "approached from the port by a wide and beautiful boulevard bordered by handsome private residences surrounded by gardens of roses and brilliant flowering shrubs, and the city itself as abounding in handsome European shops and buildings."

The Natal of to-day, with its railways, tramways, electric lights, and all the latest conveniences and appliances of modern civilization, presents some striking contrasts to the Natal of only a few years past, when its secluded valleys, now echoing with the shrill whistle of the locomotive, resounded with the rattle of musketry, the booming of cannon, the tread of hostile armies, and the fiendish and unearthly war-cry of the savage Zulus. Its chief interior town is Pieter Maritzburg, lying 2,100 feet above sea, with an excellent climate, good roads, and railway and telegraph communication. Its mean annual temperature is but little higher than that of Washington, D. C. In the opinion of Mr. Froude (Leaves from a South African Journal), the climate is "exquisite, the days are brilliant and not overpoweringly hot, the nights are cool and fragrant with the odor of orange blossoms."

The Natal coast produces sugar, arrow-root, tea, and tobacco.

The Orange Free State and the Transvaal, which lie inland, furnish a part of its exports of gold dust, gold bars, hides, sugar, coal, and wool, amounting in 1891 to $25,000,000. The increase in exports of coal, tea, and fruits indicate the recent progress of its industries.

The tea culture promises well, and the product of its coal mines, which have railway connection with Port Durban, amounting to 120,000 tons annually, will compare favorably with better-known regions.

The production of sugar has also increased, and many are occupied in the culture of the acacia for its bark, which is an excellent tanning material.

In the districts of Oumsinga and Oumzinto gold has been mined in appreciable quantities. The mining of iron, which is very abundant and of excellent quantity, has begun, and foundries have been established.

The government of Natal is somewhat upon the Prussian model, and stimulates immigration by offering land grants and free passages to the families of immigrants and assisted passages to miners, mechanics, and others.

The British East African coast line extends four hundred miles, from Umbe river in the south to the Juba in the north, the inland line south running to Victoria Nyanza and north to 35° east longitude. The territory comprises 750,000 square miles, or six and one-half times the area of the United Kingdom and three times that of our own State of Texas.

Its ports are Wanga, Mombasa, Takaungu, Malindi, Mabrui, Lamu, and Kismayu, and it exports sim-sim (or sesame), ivory, copra, coir (cocoanut fibre), orchilla weed (a species of rocella, yielding orchil: a deep-reddish purple semi-liquid coloring matter; Johnston reports it as most abundant, even in regions from five to twelve thousand feet above sea), hides, india-rubber, etc. The importation of india-rubber into England from Africa alone amounted to $3,000,000 in 1890, and of palm oil to $5,000,000.

Other English possessions in Africa produce flax (*Phormum tenax*), abaca, and vegetable fibres in great variety.

"In the Uganda territory," says Dr. Hans Meyer, "England possesses at once the most highly cultivated and the most densely populated region in Equatorial Africa and the key to the Sûdan and Egypt, and in Mombara the best harbor on the east coast," from which a railway has recently been inaugurated to Kavirondo, via Taveta, in the Kilima-Njaro region.

THE EGYPTIAN SUDAN.

Gessi, the Italian traveler, declares that the Egyptian Sûdan might be the richest country in the world, as its climate and soil are adapted to every kind of cultivation.

The wild buffalo is very common; its herds number thousands, and together form processions miles in length, but no one thinks of making use of their hides.

Ebony, which fetches in Europe $250 per ton, is very abundant. It is pretended that the expense of transportation is enormous, but the facts, says Gessi, disprove it. He estimates the expense of transporting fifty tons from Bahr-el-Ghazal to Alexandria at $1,310, which, he says, would yield a profit of $6,000, and that fifty cargoes of fifty tons each could be obtained from that region in a year.

Among the well-known products of the region he mentions iron, copper, ostrich feathers, and a vegetable fibre resembling silk, the *Æriodendrum-au-fractuosum.*

LIBERIAN PRODUCTS.

Liberia is in the tropics; her territory stretches along the western coast of Africa, in latitude 4° to 7° north, from the river San Pedro to Cape Mount, a distance of about four hundred miles, its monotonous outline being occasionally broken by a projecting cape or river's mouth.

From the low-lying plain bordering the sea the land gradually rises toward the range of the Kong mountains, the source of the Liberian rivers, and to a boundary still undetermined in the hinterland. She can boast of no rail or public roads or telegraph lines. Her means of communication are her numerous rivers and numberless foot-paths, and her beasts of burden are men and women. Her vast treasures of vegetable and mineral wealth still lie in a great measure undeveloped; her interior is still unknown and patiently waiting for the touch of the magician's wand: the commercial enterprise of the American or European, or of her own children, the educated Americo-Africans.

Liberia's exports, when compared with the abundance and variety and great value of her natural products suitable for exportation, are extremely insignificant. They are not only insignificant in number, but in value; and consist chiefly of palm oil, palm kernels, caoutchouc, coffee and coffee plants, redwood, ivory (small quantity), ginger, calabar beans, and groundnuts also in a very small quantity, which is more remarkable as from Sierra Leone and Senegambia, close by, the export of groundnuts reaches 110,000 tons or more annually.

Liberia's imports very much exceed her exports and comprise food and other products to which her climate and soil are per-

fectly adapted. Among these articles rice, which is an indigenous native culture, takes the first rank, followed by tobacco, castor-oil, etc. Drinks play a remarkable large rôle in the inventory, as they do everywhere in Africa, and include beer, wine, and large quantities of gin. It is estimated that ten millions of gallons of spirits are annually imported into Africa, to which the native production of wine, beer, and spirits is to be added.

Tobacco leaves are used as currency in Liberia—one leaf being current for two cents, one "head" for ten cents. One "bar" represents six "heads," and one "head" six to twelve leaves.

LIBERIAN PRODUCTS SUITABLE FOR EXPORT, BUT NOT EXPORTED.

Tobacco.—Mr. Christy, of London, is confident that Turkish tobacco could be grown in Liberia.

Indigo.

Caoutchouc in great quantity, but much neglected.

Vogel's African rubber tree is indigenous; it grows 20 to 30 feet in height, bearing leaves 6 to 8 inches in length and 3 to 5 in breadth; it can be tapped at five years of age. Messrs. Warne & Co., of London, report very highly on the quality of this rubber. The *Landolphia florida*, which is perhaps the best-known rubber plant, is also indigenous and yields a quicker return than the Para and other rubber plants, as it can be tapped at three years of age, whereas the Para tree cannot be tapped under twenty-five years of age. Johnston reports having found this plant at the base of the Kilima-Njaro, two thousand feet above sea. The best kinds of rubber trees, remarks Mr. Christy, are now being destroyed in such numbers as will necessitate a reproduction by planting. In Liberia, however, at this moment rubber-producing trees and vines exist in great profusion, but the crop is much neglected.

Babool bark (*Acacia arabica*), whose habitat is India, Egypt, Arabia, and from the Senegal to the Cape (A. Heraud).—The bark yields a large percentage of tannic acid, the best quality of which gives a good color and texture to leather. Not only the bark, but the fruit and twigs could be used for the manufacture of the extract.

Prickly comfrey, a forage plant (*Symphytum asperimum*), yield-

ing from sixty to one hundred and fifty tons per acre, and well known in Ceylon, India, and South Africa, could be easily grown in Liberia.

Kola nuts (*Sterculia acuminata*).—The kola is considerably exported from other parts of Africa. It has some of the properties of cocoa, and surpasses all known fruits in alkaloids. It contains more thein than coffee or tea, quite an amount of theobromin, and three times as much strength as cocoa. It is an active stimulant, allays thirst, assuages the appetite, promotes digestion, and is a general tonic.

The chemical analysis given by Büttikofer is as follows:

Water	13.65	parts.
Thein	2.13	
Theo-bromin	.23	
Starch	42.00	
Gum	10.67	
Oil	1.52	
Albumen	6.33	
Rose fibre	20.00	
Ash	3.20	
Loss	.27	
	100.00	

As given by M. Heckel, of Marseilles, and M. Schlagdenhauffen, of Nancy:

Caféïne	2.346	Soluble in chloroform.
Théo-bromine	0.023	
Tannin, A	0.023	
Corps gras	0.585	
Tannin, B	1.591	Soluble in alcohol.
Rouge de kola	1.289	
Glucose	2.875	
Sels. fixes	0.070	
Amidon	33.754	
Gomme	3.040	
Matières colorantes	2.561	
Matières protéïques	6.761	
Cendres	3.325	
Eau	11.919	
Cellulose	29.831	

The natives are extremely fond of the kola, and in the Woloff language it is called the Kola-Bâh, or the "good-doing" kola.

It is preferred to coffee, and among the Nagos of the Niger it is offered as a pledge of friendship, which is voiced in their proverb:

> "Anger makes the arrows to fly from the quiver,
> But good words draw the kola nut from the sack."

Its popular properties are tonic and stimulative. "A nut, or even half a nut, will enable one to go without food and support fatigue for twenty-four hours or more. It is an excellent nerve tonic, and is especially effective in keeping the brain clear and active at night," and is said "to remove immediately and thoroughly the unsteadiness and stupidity due to drunkenness." The tree begins to bear in seven years, and a plantation in full bearing will yield, according to Mr. Fawcett, $4,000 per acre. The kola nut should be cultivated as coffee is in Liberia, as it is unquestionably a plant of great commercial importance. The West African variety is also indigenous with other varieties in East Africa.

Cassava is well known as a food product, tapioca being one of its forms. It is claimed that hydrocyanic acid can be procured from its roots, and that from them, when boiled, a highly antiseptic liquor is obtained, useful in preserving meats and for other purposes. Experts assert that it will take the place of Indian corn as a source of starch for the manufacture of glucose.

Arrowroot.—The arrowroot culture is now extensively carried on in Australia, the variety used there being the *Maranata arundinacea.*

Castor-oil.—The plant (*Ricinus communis*) from which it is derived is indigenous and abundant.

Sugar from the cane or from sorghum (*Sorghum vulgaris*), which in different parts of Africa is called Kafir corn, Negro cane, bushel maize, Moorish millé, durra, and aish.

The product of sugar is next in importance to coffee in Liberia, but the farmers lack the capital to work the cane or to distil rum.

Pawpaw (*Carica papaya*).—A melon tree, indigenous, and growing everywhere, and a most valuable plant for culinary purposes, medicine and food.

Mr. Hughes, in History of Barbadoes, says the juice is of so penetrating a nature that if the unripe peeled fruit be boiled with the toughest old salted meat it becomes soft and tender.

Büttikofer (Reisebilder aus Liberia) concurs in this statement,

and further remarks that the milk which produces this result could be conserved and exported for that purpose. The leaves are used as a substitute for soap.

Among the other products adapted for export are malabar pepper, cream tartar, alligator pepper, white-oak bark, cherry bark, cocoa (which grows well, but is rarely cultivated), ginger, tamarinds, bananas, oranges, mandarins, shaddocks, lemons, guavas, dyes of various colors, monkey and other skins, ebony, redwood and other native woods, very hard, of various colors, and taking a fine finish.

Fibrous Plants.—Among the numerous textiles are cotton (indigenous and of remarkable quality), rind of leaves of wine palm, leaves of Pandanus palm, suitable for hats, etc.; bamboo, grasses, and rushes of various kinds; leaves of the Anana dragon, suitable for sewing-threads and cords.

Minerals.—Iron, copper ore, silver, and quicksilver.

Herr Büttikofer reports having seen a bottle of native quicksilver at one of the factories or trading stations, and is of the opinion that the geological conditions are favorable for gold.

A LIBERIAN ELDORADO.

It is unfortunate that Herr Büttikofer had no time to explore the hinterland for the purpose of confirming the most remarkable report made by Mr. Anderson, a Liberian engineer, of that region, in his notes published some years since under the title of "A Journey to Musardu," a Mandegna village in the interior of Liberia. The Mandegnas, as before mentioned, are an extremely intelligent native Mussulman race, reading and writing Arabic as well as their own language. The territory and people are claimed by Liberia; but with the Liberians, because of the absence of rail or other roads, and beasts of burden as well as commercial enterprise, they have little or no communication. Their crude products, including gold, go to Sierra Leone and the French traders of the Senegal.

Büttikofer asserts that France has recently made a commercial treaty directly with the Mandegnas.

Mr. Anderson was the first Liberian who ever attempted a journey to the "hinterland" and possibly the last: no known attempt having been made to verify his remarkable statements

of what he saw there. He places Musardu in latitude 8° 27′ 11′ and in longitude 8° 24′ 30″, and estimates its elevation at 2,000 feet above sea, and its population at the time as seven or eight thousand. It is situated on the Mandegna plain or plateau, which he describes as terraced, at the base of the Kong mountains. He found the land to be of the highest fertility, but lightly wooded, and utilized by numerous large plantations of rice, cotton, and millet. The Mandegnas, he says, made every attempt to trade; they took me to their houses and opened small leathern bags, which each contained ten or fifteen large twisted gold rings.

Gold was worn extravagantly by the Mandegna women; their earrings were so large and heavy as to require a narrow piece of leather to brace them up to their head-bands. Gold, he continues, is certainly abundant. "I gave twelve sheets of writing-paper and four yards of calico for a large gold twisted ring of perfectly pure metal."

Iron also abounds. "At a distance of one hundred and forty miles, in a direct line northeasterly from Grand Bassa, our road led through a district which was a solid mass of iron ore. The iron was so pure that the road leading through it was a polished metal pathway, smoothed over by the constant tread of travelers, and in the dry and hot season it becomes so thoroughly heated by the sun as to be hardly treadable. We occupied three hours and a half in passing over these hills and plains of metal." (Page 83.)

At Ballatah, one hundred and fifty miles from Grand Bassa, we were taken to some outlying villages northwest of Ballatah, at the foot of some high hills. Here the Mandegnas were busy smelting iron. The furnaces were built of clay, of a conical form, and from five to six feet in height, having clay pipes in groups of two or three, close to the bottom, for the purpose of draught. Charcoal and iron were put in at the top, and at the bottom an opening was provided for the "slag and other impurities." (Page 84.)

The chief articles of trade were gold, bullocks, hides, horses, ivory, tobacco, fine leather, and an infinite variety of domestic articles and country cloths of every variety of texture and color. In 1887 it was reported to Herr Büttikofer of this region that elephants were plenty and large, and roaming in

herds of ten or twelve, and that cows, horses, goats, and smooth-haired sheep were abundant.

As an evidence of the material progress of the Mandegnas, Anderson speaks of their companies of organized cavalry, with a complete horse equipment.

The comfort of the climate and the altitude of the region may be inferred from the fact that horses and cattle exist, and that on the 16th of December, the tropical summer, Mr. Anderson's thermometer indicated but 52° F. at 4 a. m. It is possible that these statements, so positively made and in part confirmed by circumstantial evidence, are to be taken *cum grano salis;* but the probabilities of their truth are quite strong, as Mr. Anderson is a well-known resident of Monrovia, a civil engineer, of good reputation, and had no apparent motive for exaggeration. We have, beside, independent evidence that gold is to be found on the upper Sinoe

The Mandegnas are at the moment in possession of gold, as they take it to Sierra Leone for barter. The most extraordinary feature is that neither in Liberia, England, or America has any known effort been made to confirm these tales of a new El Dorado.

Liberian Medicinal Plants.—Among the many medicinal plants of Liberia and the tropics *the pawpaw* before spoken of has, in addition to its food and culinary, a medicinal value. Its active principle is papayotin (Peckholdt), which will dissolve an equal weight of flesh and albumen, and the false membranes of croup and diphtheria are claimed to be destroyed by it. It is also employed in splenic and hepatic enlargements. (London Medical Record, April, 1875; Pharmaceutical Journal, June, 1875.)

The hemorrhage plant (*Aspilia latifolia*) is effective in controlling pulmonary hemorrhage, and was successfully used by President Roberts, of Liberia. A decoction of its leaves is taken in doses of one and a half ounces three times daily.

Termite earth is useful as an antiseptic in ulcers, boils, and gangrene.

The kola nut has also a therapeutic value as a stimulant.

Liberia also furnishes the common products—alum bark, licorice, calabar beans, senna, and many other plants whose medicinal value is unknown to the residents.

Other indigenous fruits and vegetables are wild grapes, plantain or pisang, mangoes, alligator pear or Liberia "butter pear" (*Persea gratissima*), the stone yielding a black indelible ink; sour sop (*Anana muricata*), "the gift of God;" alligator apple, which is not to be confounded with the alligator pear; wild peach, melons of all sorts, ananasstaude (*Ananassativa*), a very common and very delicious fruit shrub; sweet potatoes, yams, eddoe (*Colocasia esculenta*); the tubers are eaten like potatoes, the leaves like spinach, and the corms are used in soap-making; cabbages, beans, portulak (*Portulaca oleracea*), most common; charlotten (*Allium ascalonicum*), native onion; tomato, egg-plant, gourds, maize, and millet.

LIBERIAN COFFEE.

Of all the manifold products of Liberia and tropical Africa the one to which the most care and attention has been given, and consequently the one which has been up to the present time most thoroughly developed, is the coffee plant.

In Mr. Christy's opinion, the Liberian coffee plant is likely to surpass and supplant that of Arabia, as it flourishes equally well on high or low lands, while the Arabian requires high land. It has a more vigorous growth than the Ceylon plant, bears exposure better, has a larger yield (20 to 24 pounds, the full-grown tree), a larger berry, and greater freedom from disease.

A Ceylon planter makes the statement that an estate of twenty or thirty acres of Liberian coffee will yield as much as one of two or three hundred acres of Arabica or Ceylon. Its quality is also said by experts to be greatly susceptible to improvement.

Büttikofer is of the opinion that if the Liberian farmers had more capital they could cure their product better and obtain a better price. Unquestionably, the prejudice against Liberian coffee because of its rank flavor, which is sometimes encountered, is almost entirely due to its being hurried to market, insufficiently cured, to meet the pressing necessities of the cultivator; but, in spite of these drawbacks, such is the favor with which the plant is regarded, that in answer to the daily increasing demands, it is not only sent to all parts of the African continent, but to India, Ceylon, and other foreign countries.

PRODUCTS OF INTERIOR TROPICAL AFRICA.

If we have exhausted the catalogue of Liberia's commonly known products, we have by no means completed the list of those valuable plants which are comparatively unknown, or of those non-indigenous plants to which her climate is adapted.

It is well understood by experts that both within the tropics and in the contiguous zones "there is a vast number of plants which would be of incalculable value to mankind if they were more generally known" and introduced, and that under the powerful rays of the equatorial sun are nourished many vegetable poisons of violent activity which, when better known, will become the most precious therapeutics. Speaking generally, the products of Liberia are the products of all other parts of Central Africa, varied only by the differences in climate, dependent on greater elevation; and every useful plant known to the civilized or semi-civilized world, if not indigenous, can be successfully cultivated in some portion of the continent. The missionaries of Cardinal Lavigerie, of noble memory, report the inter-tropical region of Lake Tanganyika to be one of astonishing fertility and productive capacity. The natives, when not too indolent, obtain two harvests annually, ordinarily planting potatoes after corn. Among the principal cultivated plants are the *sorgho* (moutama), a species of millet, yielding from two to three hundred for one; the stalks are four or five metres high, and furnish two varieties of grains—one white, the other reddish in color. These grains are made into flour for food, or by fermentation into an intoxicating liquor called "pombe." Beside the sorgho, the *ulezi* (*Elusine coracana*), a small reddish grain, is used for distillation into "pombe;" *millet*, which is found most everywhere; *maize*, which occupies an important place as an alimentary plant; *rice*, which does extremely well in the lowlands, and of which there are several varieties, is used by the natives more as a luxury than as a substantial food.

Sugar-cane is also considered a "culture de luxe" and grows to a height of thirteen feet, while the cassava, sweet potato, and yam are found in all parts, the latter sometimes weighing fifty to sixty pounds.

The cardinal's missionaries are enthusiastic over the banana, declaring that there is not a plant which, upon so small an

area, produces such an abundance of nourishment—by their calculation, thirty-five times more than the same area of corn. It is eaten ripe or green; when eaten green it is cooked. A variety of the banana is much esteemed because of its value in distilling a very alcoholic liquor—sweet or dry—depending on the degree of fermentation. A very good vinegar can also be made from it.

Beside the usual great variety of vegetables, including asparagus and mushrooms, the missionaries found pimento, a variety of "mad apple," a sort of salsify, and the matougou, the fruit of a creeper which has the taste of a potato.

Oil plants abound, and among them the groundnut, the sesame, oil palms, castor beans, etc. Of the medicinal value of castor-oil the natives are absolutely ignorant, employing it solely as an unction for the body. The fathers experimented successfully with the oil for lighting purposes. Palm oil was also used and found to burn with an agreeable odor.

The nutmeg tree grows in many places, as well as the mpeta, a beautiful tree whose fruit, the size of an almond, contains a perfumed oil. On the western shore of Lake Tanganyika, in the forest of the Ugoma, grows in abundance the mkueme (*Teifaria pedata*), whose seeds contain ninety per cent. of an excellent edible oil. Beside the butter tree (*Bassiaparkii*), before mentioned, there is to be found at the south of the lake a fine forest tree called the chikizi, the fruit containing six seeds, from which the natives obtain an oil of a reddish color. In short, throughout Central Africa there are oil seeds and plants in endless variety and exhaustless quantity.

In the forests of Marungu the missionaries found a species of usnée, from which might be extracted a dye like that of the usnée of Peru.

From the mkorongou (probably the *Ptéolbe santaloïde*) and the mkoula the natives obtain a very much-esteemed red dye.

Tobacco is universally cultivated and rivals the best Cuban.

The wild hemp abounds; its properties, unfortunately, being well understood and utilized by the natives.

Indigo trees are abundant, and caoutchouc is furnished by the londolphia; the *Ficas elastica*, and other creepers, trees, and shrubs everywhere.

Textiles.—Textile plants are also numerous: Cotton (every-

where indigenous), the ouatier (*Asclepias syriaca*), the bochmeria nivoea (a root), the ramie (which combines the qualities of cotton and silk), the pandanus, the boulouba, the roseaux matetes, the bambous, and numerous varieties of creepers furnish other textiles. The bark of the mbouzou, when beaten, makes a sort of vegetable cloth. The bark of the miombo is also used for clothing, baskets, and canoes.

In the neighborhood of the lakes the elephant tree is conspicuous among the forest giants, having a trunk as straight as an arrow and measuring from root to branch at least ninety feet. Canoes made from these trees measure fifty feet in length.

Among the valuable woods are the mzima, which has the color and texture of boxwood; the teck, or sisam of India, a false ebony of a beautiful shade.

Fruits and vegetables of all descriptions are abundant, and when non-indigenous can generally be acclimated.

The flora is varied and beautiful and deliciously perfumed. To its beauty and fragrance the natives are indifferent: to them the flowers are as common herbs.

The marshes and river banks are garnished with the luxuriant papyrus (which Schweinfurth asserts is now nowhere to be found either in Nubia or Egypt) and decorated with water lilies of enormous size and varied colors.

MEDICINAL PLANTS.

The flora of Africa abounds in plants possessing all the properties known to medical science or required in its pharmacology, beside many, which entirely unknown to our *materia medica*, not only possess well-known virtues, frequently in enlarged measure, but many medical properties which plants have not hitherto been known to possess. The Cape Colony is especially rich in medicinal and economic plants, its flora being wonderfully rich and peculiar.

Fever and other specifics abound, and many new toxics, antidotes, antiseptics, and narcotics have been discovered in use by the natives.

Leprosy is a common disease among the natives, and is said to be successfully treated by some entirely new native remedies.

Lord Churchill mentions an antidote for strychnine poison found in Matabeleland, and an antidote for snake bites and Tsetse-fly poisoning in the Transvaal. The *Tarchonanthus camphoratus* is successfully used as an antidote for snake bites at the Cape.

Barth, the African traveler, used Shea butter (an oil expressed from the seeds of the *Bassia parkii* before mentioned) effectively in the swellings of the feet produced by scurvy.

AFRICA'S NEEDS.

Our wonder and admiration and love of the marvelous are continually excited and stimulated by the story of her astonishing agricultural and mineral wealth, her great fertility, and the prodigious variety of her natural products, but fortunately for us, and especially for our laboring classes, there is no sufficient social or politico-social or economic necessity of stimulating or encouraging emigration of our working class from this portion of the world toward Africa.

On the contrary, the tide of immigration is still rapidly flowing toward our own shores, where, taking into consideration the entire environment, the conditions of existence are better and the rewards of industry greater than at present are obtainable upon any other of the world's great continents.

Among the sons of Africa resident here there is still, and very naturally, a latent, slumbering love of their fatherland, giving birth to the hope and desire that they may some time see that land of which they have so often been told, and which has been the romantic subject of many childhood dreams; but however hard the social and economical condition of the Negro laborer may appear to be here, in the present stage of material and social development in Africa it is likely to be very much worse. It must be remembered and enforced that "*Africa is literally a continent of the unemployed*," and the emigrant to that land, flowing, as it really is, "with milk and honey," if without capital or any means of support excepting the work of his hands, would find himself at once face to face and in open competition with the myriads of free and enslaved laborers, who are willing or made to work for the pittance of wages ranging from a yard or two of

calico per week to the twenty-five cents per day or six dollars per month, with rations of rice and gin, obtained by the acclimated and powerful "Krus," the sailors of the Western Coast.

M. de Brazza reports that he has utilized as laborers the ferocious Pahouins, a race of many thousands on the same coast, who are intelligent and good workers, and well satisfied with the value of twelve cents per day.

Dr. Hans Meyer is confident that the true wealth of Equatorial Africa is not so much in its mineral treasures and the wealth and variety of its animal and vegetable products as in the latent, undeveloped capacity of its people for labor.

Dr. Carl Peters declares that "the magic process which will open the dark continent to civilization is the organization of native labor." This capacity for work is being rapidly developed under European stimulus.

In 1883, two years before the creation of the Independent State of the Congo, the number of porters who would consent to serve the Europeans was but a few hundreds annually.

In 1893 the number to be found on the route in the region of the cataracts and below Leopoldville is raised to 100,000 annually, and is daily increasing. It is true that at the Kimberly diamond mines the native laborers obtain eighty cents per day, a rate of wage which is as exceptional as the work is exceptional, and is only to be found in large mining centers or centers of population, where the expense of maintenance would be equally unusual.

The emigrant who, without capital, would with his own hands make a home and a plantation for himself must contend against an unaccustomed climate, the absence (on the littoral plain) of draft animals, the luxuriant vegetation of the tropics, his ignorance of a new culture, and of strange insect and animal pests, and the many disadvantages and accidents peculiar to all new regions and countries.

Africa, at this important epoch in her material and industrial development, does not need common laborers, but money and brains—educated men, black or white, without distinction of race or color, with some capital behind them beside brawny arms and willing hands. The laborers are plenteous and the harvest is plenteous, but capital is needed to gather it.

Africa needs geologists and mineralogists and capitalists to locate, value, and exploit her vast accumulations of mineral wealth;

Botanists to discover and practical chemists to utilize the hundreds of new and useful medicinal plants with which her forests abound; to establish gardens of acclimatization for the plants of other lands and to develop those which are indigenous;

Agriculturists to point out the value and capacity of her soils and to develop the many indigenous fruits, vegetables, and grains useful for food and the commerce of the world;

Merchants, not simple traders who are content to take the natural products as they find them, but broad-minded, far-seeing men, willing and anxious to develop its inexhaustible resources of every kind;

Capitalists to build railways and open waterways, which, upon Africa's littoral plain, are absolutely necessary to reach and develop the salubrious and fertile hinterlands and mining regions; (if the railway is a commercial, political, and social necessity in our own western territory, it is a hundred times more important upon the shores of Africa, where any considerable development is absolutely impossible without it)

Technical experts to examine and report upon the numerous textiles of unknown value with which Africa abounds;

Distillers and brewers to stimulate the cultivation of the cane, the sorgho, and numbers of other saccharine plants;

Railway engineers to mark out and locate the future paths of African commerce, which shall establish and bind together the continent in its struggle for a higher civilization.

As has already been shown, England, France, Belgium, and Germany are intensely and practically alive to the importance and keenly appreciate the rising value and the immeasurable and illimitable field of African commerce.

Expedition follows expedition—geographic, scientific, commercial, or humanitarian—into Africa, each returning laden with new, fresh, and frequently startling information of the varied mineral and agricultural treasures found in the heart of the dark, mysterious continent.

An American expedition to Africa should be at once organized, composed of geologists, mineralogists, botanists, zoölogists,

mining engineers, agriculturists, and commercial experts, in the interests of science and of American commerce.

Our mercantile organizations would do well to emulate the commercial enterprise of France, or at least lend their influence and financial aid to others.

Our geographical and scientific societies should not only be willing, but anxious and enthusiastic in an organization promising such important results in every department of the world's knowledge.

Of all the great commercial nations of the world, shall ours be the only one to lag behind in the resurrection and christianization of the African continent?

God offers Africa to christendom and civilization. "Take it!" said Victor Hugo, "not by cannon, but by the plow! not by the sabre, but by commerce! not by battle, but by industry! not by conquest, but by fraternity!"

GEORGE R. STETSON.

WASHINGTON, D. C.

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THE LIBERIAN EXHIBIT AT THE WORLD'S COLUMBIAN EXPOSITION.

The Government of Liberia, by a joint resolution of its legislature, passed in February, 1892, provided for an exhibit at the World's Columbian Exposition, to be held in Chicago in 1893, and Hon. Alfred B. King, of Clay-Ashland, Liberia, and Mr. William E. Rothery, Liberian consul at Philadelphia, were appointed commissioners to prepare and take charge of the exhibit and represent the Republic of Liberia at the exposition. The following extracts, taken from the report of Commissioner King to his government, give an account of the purpose and character of this exhibit:

"The primary object in view was to have the exhibit so arranged at Chicago as to put the Liberian Republic in touch with the civilized world, to advance its commercial and industrial interests, and especially to attract attention to its unrivalled coffee.

"Commissioner King purchased and had prepared the commodities and articles required for the purpose. He sent messengers to the various tribes, kings, and chiefs in the interior, asking them to help the commission by selling to it the many curious things at present and formerly used by them. Where the curio or relic was above a money value the request was made that it be loaned to the commission for exhibition purposes, the commissioner promising to return whatever was entrusted as a loan. In this way, by the end of January, 1893, the exhibit displayed at Chicago was secured. In round numbers it consisted of thirty tons of material, valued at $5,000. The ethnological portion of the exhibit was not only curious, but particularly interesting to scientists. It showed most graphically the manners, customs, rites, and ceremonies of the primitive people of Liberia.

"In Liberia, Hon. Arthur Barclay, Postmaster-General of the Republic; Mrs. Louisa Coleman, the wife of the Vice-President; Bishop Ferguson, Mrs. Florence A. King, W. H. King, M. T. De Coursey, Moses S. Boyle, H. Cooper & Son, Burgess Peal, Rix & Lomax, Williams Brothers, E. A. Snetter, J. H. Brooks, A. Woermann & Co., R. H. Mitchell, and Hill & Moore rendered

the commission valuable assistance in making up the exhibit. Without the active co-operation of these the collection would never have been gathered in time.

"The exhibit was shipped from Monrovia, under the personal supervision of General R. A. Sherman, on the 4th of February, in five boats, carrying 129 cases, many of them large and unwieldy. In sending his boats up the St. Paul's to Clay-Ashland for the exhibit, as well as in reshipping it from his wharf in Monrovia to the steamship which was to bear it to Liverpool, the General put himself to no little trouble and manifested much interest in the safe transport of the exhibit. While on board the British and African steamship the exhibit was handled with care, otherwise many of our packages would have been useless for exhibition purposes at the end of such a long journey. In England the commission met with friends in the business houses of Elder, Dempster & Co., Edwards Brothers, Henry Hayman, and C. T. Johnson.

"Through the friendly offices of Hon. W. I. Buchanan, Chief of the Department of Agriculture of the Fair, a most desirable location was secured. From that time on Chief Buchanan became and remained a most staunch friend. He was untiring to make Liberia's display a most creditable success, as well as to make the stay of the commission a pleasant one during the whole time of the exposition.

"Regarding the location of space allotted the Liberian exhibit, the place assigned was unquestionably the most desirable that could be had in the Building of Agriculture. Situated in the extreme northwest corner of the structure, it faced two of the prominent entrances to the main aisles on the north and west, a point where the great crowds passed day and night. Its dimensions were 37 feet 6 inches by 37 feet 4 inches, making nearly 1,402 square feet, under a gallery 29 feet from floor to ceiling. On the east was the collection from Curaçoa, and on the south that of Mexico.

"The Liberian court was constructed entirely of native African woods, ropes, and tusks of elephants. A pyramid was built in the center of the court in three sections, 14 feet high. At each corner of every section was placed a tusk of ivory, and arranged on the shelves in neat glass jars were the different grades and qualities of coffee, cocoa, ginger, arrow-root, peanuts, palm oil,

palm kernels, palm-kernel oil, vegetable butter, corn, rice, calabar beans, locust beans, annito-seeds, malabar pepper, alligator pepper, &c., the whole decorated with native implements of war. A circular counter was made at the west side of the court, upon which was placed three flat and one upright glass show-cases to display curious exhibits to good effect. At the west entrance to the section there was an arch of pine, draped with native cloths of various tribes. The south entrance was constructed of mahogany, the columns being surmounted with the two largest tusks we had, the whole forming another archway. The main entrance was draped with French trimmings and with two Liberian flags. Each corner-post of the court was of mahogany, crowned with a tusk and draped with the star and stripes. The pyramid in the center was decorated with four flags. On three long tables made for the purpose were placed suitable show-cases. On a show-board 12 by 12 were displayed photographs, a map of Liberia, a plan of Monrovia and of Clay-Ashland. the coin, currency, and stamps of Liberia, and some curios. The entire north wall was draped to the height of 29 feet with native cloths and skins. Two stands were erected, on which were placed models of an Americo-Liberian house and a primitive house in contrast. There were also four columns, 29 feet high, in the section. These were draped with native cloths, curios, and fibres. Our orchids and bulbs arrived in perfect condition.

"As soon as all the exhibits had been properly and finally installed we entered the following articles and commodities for competition and examination:

"1, coffee; 2, cocoa; 3, palm oil; 4, kernel oil; 5, palm kernels; 6, palm soap; 7, arrow-root; 8, hard-woods; 9, dye-woods; 10, seven kinds of fibres; 11, ivory; 12, rubber; 13, minerals; 14, ethnology.

"From 1,000 to 12,000 persons daily thronged the Liberian court. Many came once, only to return again and bring their neighbors and friends. It was formally visited by a deputation of the American Colonization Society, composed of Rev. Dr. Sunderland, Rev. Dr. Addison, and Secretary Wilson. It was also visited by a number of distinguished Liberians: Hon. Arthur Barclay, Rev. David A. Day, Bishop H. M. Turner, Rev. Paulus Moort, M. D.; Prince Mommolu Massaquoi, Bishop Samuel D. Ferguson, and several of the Liberian consuls.

"At the time of the World's Fair congresses the duties of the commissioners were such as to prevent their attendance at all of these gatherings. Commissioner King, however, addressed the congresses on 'Public Press,' 'Folk-Lore,' and 'Africa and Horticulture.' He also delivered a lecture on the 'Forestry of West Africa,' and one on the 'Primitive People of Liberia.' The first was given at Assembly Hall and the latter at the Atheneum, before the Academy of Sciences. He also assisted in the formation of the Horticultural Society of the World, and nominated Hon. H. R. W. Johnson for honorary vice-president, as the most distinguished horticulturist in Liberia."

AFRICAN SLAVERY.

I remarked, says the missionary Coillard, that the prisoners of war, the Ba Lubale women and children, were grouped near me. They had probably never before seen a white face. I said a few words to these poor creatures, through an interpreter, which they received with a great clapping of hands.

During four consecutive days Lewanika, their captor, was entirely absorbed in the division of the booty. I had the curiosity to see how he proceded. It was nothing more nor less than a division and parceling out of human cattle. It is impossible to look into these eyes without feeling a pressing grief at the heart. I had never before been so near a slave market.

Imagine thousands of the Ba-Rotses grouped in a circle before the king and the principal chiefs of the country; in the center, crowded together, are the hundreds of unfortunate prisoners; among them not a man, not even a young man; and why? Because they never in their cruel warfare make a man a prisoner; they are flayed alive and killed.

The captives are young women, of whom a great number have infants on their backs; there are young girls, and a multitude of children of all ages, from one year to twelve, of both sexes.

Now one band after another, six or seven at a time, are made to rise and approach the judges and submitted to a minute inspection, during which the thousands of eyes are fixed upon them with shameless cupidity. The women, emaciated, revolt-

ingly filthy, and intimidated, generally bow their heads. They are, as is their tribal custom, in a state of nudity, which provokes the obscene remarks and laughter of the multitude.

Following a great consultation under the royal pavilion, a chief advances toward the unhappy prisoners to carry out the good pleasure of the king

The nursing infant is left for a time at least at the breast of its mother, but all the others who can walk are, like so many domestic animals, distributed right and left. Poor infants! no more father or mother for them; but at some future time, as these men have to-day, they will make it their pleasure and glory to make orphans.

Here an infant of hardly three years, torn from the arms of its young mother, cries and shakes itself free, but, hemmed in by the crowd, is crying and distracted in search of its mother, who has already been taken from it. "Beat it!" they cry, laughing at its new master; but he understands his interests better than they; it has good reason for being refractory.

It is now the turn of another young mother. I hear the order, "Take away this child," apparently her first born, but she, oblivious of her situation, seizes and holds it convulsively in her arms, her eyes flash fire, and her lips pour out torrents of words which provoke the hilarity of all around me. They understand that the young mother is ready to die rather than be separated from her child, and have already begun to use force, when Lawanika orders them to leave him his child. The fortune of war! he has the luck and two domestic animals in place of one—the mother and her son.

I can stay no longer, but leave these heartrending scenes, which succeed each other during many days.—*Journal des Missions Evangeliques.*

THE GORRONAMMAH.

The gunboat recently built in Liverpool for the Liberian government is named the "Gorronámmah," an African word signifying "a new defense." It is a steel cruiser, 95 feet long, and armed with two Nordenfelt guns. It is to be used in preventing any violation of the revenue laws and policing some of the disorderly coast tribes of aborigines.

INCREASING DEMAND FOR SILVER COIN IN AFRICA.

The community was not a little startled by the announcement on Thursday evening that it was the intention of Her Majesty's government to prohibit the further importation of English silver coins into the colony. The announcement, coming at a time when there is an exceptional dearth of silver and an excessive demand for it, had the effect of producing a general sense of uneasiness among all classes, and it was felt that nothing short of a financial panic would ensue should the importation be stopped. Any one acquainted with the local conditions of our trade will readily understand that the present dearth of silver is due to a growing tendency on the part of the interior natives to adopt silver currency in lieu of cowries, the barter system, and slaves, and there is every probability that the demand will increase with the further opening of the roads and development of trade. Cash is the only real abolisher of slavery, and it is inevitable that it should exert its influence on the natives and entirely supplant the traffic in human beings. Metallic currency is also fast superseding the barter system which has hitherto prevailed among the interior peoples, who now prefer to receive payment in cash for their produce instead of the trade rum and gin which has worked such great wreck and ruin among them. Evidently, then, the growing demand for silver is indicative of a most wholesome development among the interior tribes, and any measure calculated to hinder or impede such development aims at rendering abortive all recent efforts for opening the trade routes and suppressing the traffic in slaves, thereby tending to militate against the advancement and best interests of the whole country. It is most satisfactory that at the meeting held at Government House yesterday morning the merchants were unanimous in their opposition to the proposed measure; and the unanimous expression of opinion thus given should be a sufficient proof of the erroneousness of the idea, whatever it may be, upon which the proposal is based. So long as a fair rate of premium is maintained, we see no reason why the importation of silver should be restricted or hampered. Importation under such conditions implies fair trade to all and commercial development; and in this wise is illus-

trated in a most practical form the benefits conferred on the community by a sound banking system.—*The Lagos Weekly Record, March* 4, 1893.

The rapidly extending use of silver coin in West Africa, though not a considerable fact in the monetary controversy is in several respects important. Intelligence reaches us from Lagos of a meeting of merchants convened by the deputy governor of the colony to consider the active demand for and the scanty supply of English silver coin there. For some years past silver money has been steadily flowing into the interior, where it is taking the place of cowries, spirits, and slaves, all of which have been long employed for monetary purposes. Even barter is giving way before the more advanced method of conducting trade by means of coin. The consequence of this interesting change is that while the import of silver into the colony has been rapidly growing, the export homeward has all but ceased. The meeting in question was convened for the purpose of affording the colonial government information as to the genuineness and the prospects of permanence of the demand for silver coin. So convinced was the deputy governor of the need for additional supplies that he agreed at once to sanction an extraordinary importation from the home mint of £200,000 worth of new silver coin, in successive shipments of £20,000 each. For this the merchants expressed their willingness to pay a premium at the rate of 2½ per cent. The transaction is of course advantageous to the British mint, which, as every one knows, is now realizing a very handsome profit upon its silver coinage through the low gold price of that metal. But it is not at Lagos alone that the movement of silver toward the interior is going on increasingly. In 1887 the total amount of English silver coin exported to the whole of West Africa was only £78,042; in 1890 it reached £612,884, and in 1891, £561,836. The statistics for 1892 are not yet available, but it is certain that there was some falling off, one result of which is the present scarcity at Lagos. It is obviously an advantage not only to legitimate commerce and the spread of civilization that the growing use of silver in the African interior should be encouraged, but also to the home treasury, which receives the profits of the mint; and it is difficult to understand why there should have been—as is, not without

reason to believe—considerable reluctance on the part of the colonial authorities to facilitate the movement. It may be pointed out that unless an abundant or at least a sufficient supply of English coin is provided, the demand will be met by foreign or even illicit and spurious money. The export of foreign as well as of English silver coin to West Africa is certainly growing, and it is stated that from Lagos a certain amount of false money has already found its way into the interior.—*Manchester Guardian.*

Gibbon, in his history of "The Decline and Fall of the Roman Empire," has given the following accurate definition of money: "The value of money has been settled by general consent to express our wants and our property, as letters were intended to express our ideas; and both these institutions by giving a more active energy to the powers and passions of human nature have contributed to multiply the objects they were designed to represent. Money, in a word, is the most universal incitement, iron the most powerful instrument of human industry; and it is very difficult to conceive by what means a people, neither actuated by the one nor seconded by the other, could emerge from the grossest barbarism."

On the other hand, it is admitted by all unprejudiced persons that the total suppression of the slave trade, with all its concomitant evils, would be of such enormous benefit to the world that almost every consideration of opportunity and means sinks into comparative insignificance. That the increasing use of silver money is one of the factors which make for the suppression of the slave trade is as true as it is remarkable, the "nimble ninepence" everywhere superseding the former slave-bartering system with a rapidity which is inconceivable. Evidently, then, the growing demand for silver coin among the natives of the West Coast hinterland is indicative of a most wholesome development, and deserves to be encouraged and promoted to the utmost extent.

It is much to be deprecated, then, in the interest of the progress and enlightenment of our hinterland, that the supply of silver to the colony from the British mint is now restricted; and we are induced to hope for better things from that true friend of all native races, Lord Ripon. There is no check, we

understand, placed on the import of British coin from the United Kingdom to other colonies, and surely if this colony is to have coin for circulation it is better that it should come from such an undoubted source as the royal mint, not to mention the substantial profit accruing to the government when coin is issued from this source. One condition we are compelled to emphasize, and that is that should mint orders again come into force, the distribution should be through the medium of a central agency, such as our local bank; and here we must express our surprise that this course should not meet with general approval, provided that supplies are available to all sections of the community at a charge fair and reasonable and approved of by the government. When the civilizing and elevating use of coin as a medium of exchange is extolled by such an undoubted authority as Gibbon, we marvel that after the experience of a century's philanthropic effort and missionary enterprise, obstacles should be placed in the way of the introduction of means that will most powerfully conduce to bring about the end desired, in the pursuit of which so many noble lives have been sacrificed and countless treasure spent.—*The Lagos Weekly Record, June* 17, 1893.

PRESBYTERIAN MISSIONS IN LIBERIA.

Monrovia, Rev. Frank B. Perry; Brewerville, Rev. J. W. N. Hilton; Schieffelin, Wm. H. Blaine; Careysburg, Rev. R. A. M. Deputie; Grassdale, John M. Deputie; Greenville, Sinoe, Rev. D. W. Frazier; Queh, in Upper Virginia, Samuel J. George; Warney, J. E. Jones; Mt. Tabor, Mrs. S. E. Nurse; Granger, Elizabeth C. A. Perry; White Plains, Rev. Z. R. Kennedy.

The statistics of the Mission in Liberia for the year 1892 are as follows:

Churches.—Monrovia, 64 members; Clay-Ashland, 55: Brewerville, 18; Careysburg, 18; Beadle Memorial, at Grassdale, 29; Greenville, Sinoe, 86; Schieffelin, 36; Granger, 26. Total communicants, 332.

Schools.—Clay-Ashland, 49 pupils; Grassdale, 13; Mt. Tabor, 49; Schieffelin, 46; Careysburg, 19; Warney, 20; Granger, 38; Queh, 15; Brewerville, 30. Total of pupils, 279.—*The Church at Home and Abroad, June*, 1893.

THE NEGRO MOVEMENT TO LIBERIA.

A batch of Negroes who are returning from America to the land of their forefathers in West Africa, left Liverpool on Saturday in Elder, Dempster & Co.'s steamer *Dahomey*. They consisted of three families, and numbered nineteen persons. They are all descendants of slaves who many years ago were deported from Africa to the United States. The present party came from Tennessee, and their destination is Grand Bassa, Liberia, where they are to be apportioned certain plots of land for cultivation. The group were characteristic of the Negro to be met with in the Southern States on the farm or the cotton plantation, and their picturesque appearance created a great amount of interest as they went along the streets. They said there were many thousands of their race in America who were anxious to return to the land of their forefathers, but had not the means. Mr. Alfred L. Jones, of Liverpool, who has taken a great interest in the scheme, and has assisted the people to return to Africa, saw them off on Saturday, and wrote specially to President Cheeseman, of the Liberian Republic, to look after them and ensure the success of their desires.—*The African Times*, *June* 1, 1893.

The Cunard steamship *Aurania*, which arrived at Liverpool on June 27, had among her passengers some of the Negroes who are migrating from the United States to Liberia. The Liberian government offers suitable allotments of land in that Republic to members of the African race who, by their training and character, will make suitable settlers. This fact having been proclaimed, many Negroes have already gone to Liberia, and their reports are so encouraging that many others are preparing to follow. One of the party which arrived by the *Aurania*, when asked why they chose Liberia, said: "You see it is a Republic. It is governed the same as the United States. There is a President and Congress. We also want to get among our own people, for, although we are free in the United States, we have had great obstacles to contend with by the white people offering trade opposition to us and trying to put impediments in our way. We have heard excellent accounts from our people

who have gone to Liberia. They have been most kindly treated. They have got allotments of land; some carry on business as shoemakers and other callings, and all are trying. In consequence of this news, clubs of colored people have been formed in the different Southern States to assist, not in money, but with information, our people to leave places where they are harshly treated and settle in Liberia. We are the first of a band of 125 colored people who are about to leave Illinois to settle in Liberia. We are free emigrants, and we pay our own passage. The only assistance we have is a letter that precedes us to the Liberian government from Mr. A. L. Jones, of Elder, Dempster & Co., and upon the receipt of it the Liberian government will give an allotment of 25 acres of land to each male adult.—*The Lagos Weekly Record, July* 29, 1893.

HEALTH IN AFRICA.

We have at different times had occasion to refer to the sensational reports concerning the healthfulness or danger of certain parts of Africa for the Caucasian. The ablest explorers, scientists, and geographers agree that there are many parts of the Dark Continent which cannot be excelled in salubriousness by any other section of the globe. Now comes still further conclusive evidence of the fact, being the result of an experiment tried by the Society of the Upper Congo in connection with the building of the railroad, which places the fact beyond question that Caucasians can live there in health and tolerable comfort with proper sanitary precautions. The society placed the two hundred and fifty whites in its employment under the care and protection of a staff of five physicians, who regulated their diet and manner of living. As a result, the number of deaths has been surprisingly reduced and the health of the company far surpasses expectation.

Still more emphatic is the testimony concerning Mashonaland, our new field. At a recent conference in England, Rev. Owen Watkins said, "If you have a cough or do not want to sneeze, go and live there. It is a splendid place for delicate folks with

weak chests. As some one said about another country, all you have to do is to tickle the earth and it will laugh into harvests. It is one of the finest countries I have ever seen in my life; indeed, it will provide homes in the future for millions of white people." But such testimony might be duplicated in almost any part of the African continent, except possibly the sedgy river bottoms, the swamps, or the desert, where even the natives do not care to live. Gradually the truth is impressing itself upon the white races that Africa has within her borders lands as fair and fertile and salubrious as their own, and so vast and attractive that it would appear to be inevitable that they must be chosen in the near future as the home of much of the surplus population of the older, wornout countries.—*The African News, July*, 1893.

THE DRINK-CURSE IN AFRICA.

A leaflet by Mary Clement Leavitt gives a very direct and forcible statement of one of the deadliest wrongs ever inflicted upon a helpless people in the much-abused name of commerce, says the Toronto Missionary Leaflet. A brief account of the organization of the Congo Free State under articles which pledged nearly every nation of Europe, as well as the United States, to "watch over the preservation of the native tribes and to care for the improvement of their moral and material well-being," is followed by a description of present conditions certain, if permitted to continue, to defeat every noble effort in behalf of Africa. A few plain statistics show that the very governments which have expressly engaged to co-operate in the suppression of the slave trade, to guarantee liberty of conscience and religious toleration, and to protect and favor Christian missionaries and all philanthropic enterprises are at least tacitly sanctioning a more abominable traffic even than that in slaves. When in one year Germany, The Netherlands, France, Great Britain, and the United States sent 10,377,166 gallons of liquor to Africa, it is small wonder that the missionaries find their hands tied, and the natives cry despairingly that it is too late to bring the gospel when drink has come first.—*The African News, September*, 1893.

WHY FRANCE WANTS A SLICE OF LIBERIA.

The Captains Marchand and Manet have been placed at the disposition of the under secretary of state of the French colonies for one year. A mission, having for its principal object the exploration of the River Cavally, has been confided to them.

This river marks the eastern limit of the Republic of Liberia and separates that Republic from certain territories acquired by France to the west of the Ivory coast.

Captain Marchand has already explored the upper course of the Cavally, coming from the highlands, which separate its waters from those of the affluents of the Niger.

They hope, in reascending the upper Cavally, which is perfectly navigable, to find an equally navigable affluent of the Niger, and thus put the valley of the Niger in communication with the valley of the Cavally.

Captains Marchand and Manet will also explore the course of the River Cavally to ascertain if it can be made a way of communication.—*L'Afrique Explorée et Civilisée.*

BRIEF AUTOBIOGRAPHY OF A COLORED WOMAN

WHO HAS RECENTLY EMIGRATED TO LIBERIA.

I was born in Grundy county, Tennessee, April 15, 1864. My father was a slave, and he died, leaving my mother a widow before I was born. While I was yet a child, possibly about two years old, my mother moved to Coffee county, which joins the county of my birth, and we have lived all our lives there, within a few miles of my birth-place. She followed washing to support the family, but since I was the youngest of her large family she would never allow me to wash. I was left to amuse myself with other things. I learned to like horseback riding, and would follow relatives to the field that I might ride. I soon learned to plow, and before my shoulders were above the plow-handles I could plow well and made a regular hand. I worked on the farm until I was seventeen years old. I entered school at the

age of nine and attended the few weeks which we had, not always each year; the whole time from my ninth until my seventeenth year was twenty-six months. My mother died when I was sixteen years old, and I made my home with my oldest sister, Mrs. Phillips. I have attended Central Tennessee College since 1882, having entered in February of that year. I have been able to be in college only a few months each year, being compelled to stay out and work to pay my expenses. I have paid my way and supported myself mostly by teaching district schools. In 1887 I finished the junior normal course at the college, in 1890 completed the senior normal course, and on February 7, 1893, completed the three years' course in medicine.

I go to Liberia for the good I want to do for others, to relieve the suffering, and to assist in radiating the light of christianity and civilization to other parts of Africa. I expect to both practice medicine and to teach school in Liberia. After two years I hope to return to this country, take a post-graduate course in medicine, and then return to Liberia able to do better work in the line of medicine. I look forward to a long life to do good and help build up Africa.

Miss Georgia E. L. Patton, M. D.

THE FUTURE OF AFRICA.

Africa has a bigger future than America, Australia, or India. It is the richest of all, but, of course, everything depends on management. Take South Africa, for instance. It is very like Australia. Already the natives have begun nibbling at the idea of flocks and herds, but the curse out there is that of political mismanagement and the diversity of aims between the English, Dutch, and Boer colonists and the Englishmen who become Africanders. Years ago I proposed chartered companies, but Lord Beaconsfield was afraid of the radicals. We simply want concessions which will enable us to work the country. The Congo State should become a Belgian colony, and the unoccupied lands should become state lands. Ivory and india-rubber,

fibres, gums, every tropical and subtropical fruit are there in richest profusion. Indeed, I consider that in Africa will be the coffee and tea fields of the future, and there is really an admirable climate. The Europeans could bring up their children well there. The natives are very teachable. Even the hitherto wild tribes are already drilled into good police, engineers, riveters, etc. Take my word for it, Africa is the hope of the future, and will be the salvation of an overcrowded world.—*Captain Lovett Cameron, R. N., in "Great Thoughts."*

THE PARTITION OF AFRICA.

"The Partition of Africa," by J. Scott Keltie (assistant secretary to The Royal Geographical Society, editor of "The Statesman's Year Book," etc.), published by Edward Stanford, London, is the title of one of the most interesting books on Africa that have recently appeared, and we are indebted to the publisher for the map in this Bulletin which shows graphically the portions of Africa claimed by various foreign powers at the date of publication.

A table at the end of the volume gives as the estimated area of the continent of Africa 11,512,000 square miles, and the following table shows the area claimed by each foreign power and its percentage of the whole continent:

	Square miles.	Per cent. of whole area.
France	3,000,630	26
Great Britain	2,572,900	23
Belgium (Congo Free State)	864,000	8
Portugal	841,070	7
Turkey (Egypt and Tripoli)	836,000	7
Germany	821,950	7
Italy	602,000	5
Spain	213,770	2
Boer Republic and Swazi Land	205,120	2
Total	9,957,440	87

AFRICA

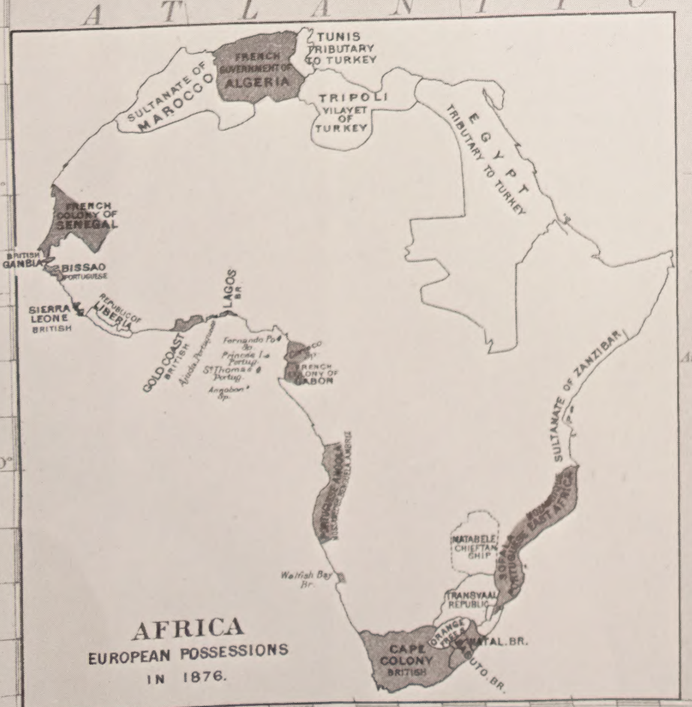
POLITICAL DIVISIONS

1893.

Scale of English Miles.

100 0 100 200 300 400 500 600

The political Boundaries &c. are printed in black on a very light ground for the sake of clearness.
Firm lines are treaty boundaries.
Dotted lines are undefined boundaries.



London: Edward Stanford, 26 & 27 Cockspur St., Charing Cross, S.W.

Stanford's Geog. Establishment.